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ABSTRACT

A study was conducted to determine the degree of access that students with special needs have to secondary and postsecondary vocational education in Wisconsin. The Wisconsin Client Reporting System as well as visits to 11 sites and in-depth profiles of a high school and a technical college provided data for the study. The study found that data collection in the vocational and technical system at both the secondary and postsecondary levels was inadequate to draw a good picture of access of special populations throughout the state. However, the study described how students were faring at the high school and technical college that were profiled, and some measures of successful integration of the special needs population into the system were found. A number of recommendations were made: (1) improve data collection processes for special populations; (2) expand evaluation to include program practices and quality as well as program inputs and outcomes; (3) promote inclusion of special populations in tech prep and school-to-work initiatives; (4) focus on program success rather than on student failure; (5) study the impact of concentrating federal Perkins funds to areas with a high incidence of special population students; and (6) develop follow-up reporting procedures for special populations students. (Contains 46 references.) (KC)

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"PROVIDING ACCESS FOR SPECIAL POPULATIONS TO QUALITY VOCATIONAL EDUCATION IN WISCONSIN"

Prepared for the

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30 West Mifflin Street, Suite 301
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EXECUTIVE SUMMARY

In Wisconsin, the Department of Public Instruction and the Wisconsin Technical College System Board share a broad perspective on access for special populations. However, each institution implements this vision differently. The DPI has chosen to interpret access broadly, by encouraging schools to enhance "equitable participation" in all programs and services related to vocational education. For the DPI, equitable participation means enrollment based on affirmative action practices in recruitment and program placement, and participation that is enhanced by provision of related services, assistive technology and supplement aids required by special populations students in order to succeed in vocational education.

The WTCSB focuses on provision of support services which help special populations students overcome potential barriers to enrollment and success at the postsecondary level. Support services delivery is essentially "front-end loaded" -- including counseling and guidance services, such as assessment, information referral and career counseling, which help special populations students enroll in technical college programs and gain access to the services they will need to succeed. Additional services (i.e., remedial education, staff development, curriculum and supplemental services) extend the service support network into the classroom to provide help to students as they proceed through their chosen program.

Program practices that encourage a full range of vocational education programs and services for special populations are included in the state plan developed by the DPI and WTCSB. Similarly, local applications for Perkins funding include plans for how the needs of these individuals will be met and assessed. There is, however, insufficient information available on the implementation or effects of these plans.

Wisconsin's DPI collects more enrollment, completion and additional student-level data than many other states (NCRVE p. 165-169). Wisconsin also performs well, compared to many states, by adjusting performance standards for secondary special populations groups and by including several performance measures and standards specific to special populations access in Tech Prep. However, these data are limited in what they reveal about special populations equitable participation in vocational education programming.

Secondary Vocational Education in Wisconsin

Wisconsin's secondary vocational education delivery system benefits from a comprehensive plan for the dissemination and use of federal and state funds. The state plan and corresponding guidelines direct Perkins funds to be used primarily for program improvement in new and emerging vocational education efforts such as Tech Prep, youth apprenticeship and School-to-Work. The DPI places a second emphasis on ensuring that members of special populations have access to the full range of vocational education programs, activities and services.

The DPI has strengthened the state accountability system for Perkins-funded programs, services and activities by including RFP planning reviews, equity plans, monitoring, and performance standards in the FY 94-95 guidelines. When fully implemented, this threefold system promises to be more comprehensive than the existing process and should provide more extensive information on special populations access.

Tech Prep, Youth Apprenticeship and a number of School-to-Work initiatives, comprise most of the new vocational programming available to secondary students in Wisconsin. Of concern is the lack of knowledge about special populations participation in these efforts. To date, special populations participation is not targeted by these efforts, and there is little information collected on special population participation in these programs statewide.

Enrollment and participation trends are primarily monitored by the DPI's Vocational Education Enrollment Reporting System (VEERS). Wisconsin is experiencing a decline in the number of vocational education courses available to students, reflecting national trends of declining enrollments in vocational education. As indicated by enrollment figures, participation rates for special population students match and slightly exceed their incidence in the general high school population.

Academically and/or economically disadvantaged students comprise 26.7% of the special populations students enrolled in vocational education. Disabled students account for 8.1% of enrollment, and Limited English Proficient (LEP) students account for .6% of vocational education enrollment. All three special population groups graduate at rates roughly similar to their enrollment rates. Females enroll in vocational education courses at a rate that is 9% higher than males, yet graduate at an equal rate. Disadvantaged students comprise the highest percentage of dropouts from vocational education programs, nearly double the number of regular students who drop out of vocational education.

The graduation information obtained from the VEERS data indicates that the rate of graduation for special populations groups participating in vocation education is roughly proportional to their rate of participation in vocational education. Follow-up surveys conducted by the DPI describe general post-graduate employment and educational status of vocational education students. Information on the type and quality of transition students are achieving is limited, with little information on special population wage rates, duration of employment, or independent living status documented.

Through Perkins funding, individuals with disabilities receive the greatest proportion of support services of any special population group enrolled in vocational education programming at the secondary level. In many high schools, the Individuals with Disabilities Education Act (IDEA), the Perkins Act, and the Americans with Disabilities Act (ADA) work together with Wisconsin's Department of Vocational Rehabilitation and to provide vocational education opportunities for special needs students. Collectively, the legislation and related agencies provide a foundation for the most comprehensive system for special population's participation and transition in vocational programming in Wisconsin. However, there is currently no capacity to determine consistency in program delivery trends for vocational education programs and services to students with disabilities.

Academically and economically disadvantaged youth in Wisconsin comprise the largest percentage of special populations in vocational education courses, but appear to be receiving fewer services than other special population groups to assist them in succeeding in those programs. There is little information available on the provision or impact of vocational programs and services regarding this population group. In short, we know these students are enrolled, but we do not know what happens to them after that.

The percentage of students with Limited English Proficiency (LEP) is small compared to the total enrollment in vocational education courses. Access to vocational programming is primarily encouraged through the use of interpreters, tutoring and remedial instruction. Little seems to be done by way of transition services for these students; there are few specific services that help these students bridge successfully to the worlds of work or higher education.

Single parent programs are generally available in Wisconsin's high schools, but only 35% offer specialized classes and services targeted to serve teen parents. The vocational content of these programs is not generally known, nor is it known how these programs work with existing vocational programs, courses activities and services within the schools. Sex Equity projects appear to have been widely attended by over 15,000 students in FY 93. Non-traditional enrollment projects targeted 4,600 students.

Wisconsin's Performance Measures and Standards provide state level outcomes for academic skills attainment, graduation rates, follow-up on employment and further education, and participation rates of special populations and gender groups. The FY 93 data is still being reviewed by DPI, and was not available for use in this study.

Postsecondary Vocational Education in Wisconsin

The WTCSB recognizes improved access and success of special populations as a primary intent of the Perkins legislation. To this end, the WTCSB targets funding of plans and projects that prioritize improvement of support services to special populations. The delivery of these services begins with counseling and guidance services, including assessment, information, referral and career counseling aimed at facilitating enrollment and placement of special populations. Supplemental services, remedial education, staff development and curriculum improvements help special populations students to participate and succeed in postsecondary programming. In the 1994-95 guidelines, districts are required to list any unmet needs by special populations category and provide an internally generated prioritization of services to address those needs.

A variety of funding sources are used to provide services and accommodations for special populations, including monies obtained through state GPR and DVR revenues, and federal legislation such as the IDEA, JTPA, ADA, AEA and Perkins Acts.

The WTCSB monitors over 1,000 approved programs for general operational factors such as enrollment and placement on an annual basis. Selected programs are reviewed on a five year rotating basis, in which WTCSB staff provide recommendations for program improvement in eight areas (including equity and access), offer technical assistance and help develop action plans. In compliance with Perkins regulations, WTCSB reviewed Perkins funded projects with an emphasis on monitoring delivery of services and assessing special population access.

On-site visits to 11 of the 16 technical college districts will be complete by the end of 1994, with the remaining 5 districts to be monitored in 1995.

The WTCSB relies on the Client Reporting System data to provide information on enrollment, student characteristics, and completion. The WTCSB provided services to over 200,000 special populations students (duplicated count -- many of the special population students in the technical college system have multiple needs, and hence are members of more than one special population group) through Perkins funding in FY 93. These services are essentially "front end" services which help students to enroll in programs and services to meet their needs. The WTCSB will be requiring all technical colleges to detail comprehensive assessment provision as part of the RFP process in the future.

The data from the Client Reporting System is also used to develop the performance measures and standards required under the Perkins Act. Three of the five performance measures used by the WTCSB provide specific information on special populations. In 1991-92, graduation rates of 35% (the standard set by the WTCSB) were accomplished for all special populations groups except the LEP and sex bias program participants. The job placement rate standard was exceeded by every special populations group, although the state average rate of 91% placement is on average 8% higher than the placement rate of special populations individuals. Training outcomes exceeded the 40% standard set by the WTCSB in all cases.

An annual Graduate Student Follow-up Survey reports on student post-graduation employment and placement outcomes. The report does not provide information on special populations students' post-graduate perceptions, employment or independent living status.

Special populations students are enrolled in all occupational areas offered in the technical college system. The Business, Health and Technical program areas have the highest concentrations of special populations students. A large number of Academically and Economically Disadvantaged students are participating in Adult Basic Education (ABE) programs and courses. Staff at the WTCSB report that there are an increasing number of students coming to the technical colleges in need of remedial and basic skills education. This has placed an increased demand on the courses and programs designed to assist students with gaining the credentials necessary to enter degree programs.

The WTCSB works with a number of outside agencies to provide a breadth of services to special populations students; these services are designed to facilitate entry, participation, transition and job placement. High schools, Private Industry Council's, DVR and community social service agencies provide a service provision and funding network to serve these students. Transition services appear to be most comprehensive for students with disabilities. Disadvantaged and LEP students do not appear to receive similar benefits to students with disabilities. These groups lack a cohesive support network at the postsecondary level.

Currently, it is not known how many special populations students are participating in new and emerging vocational education initiatives. There is no definitive data on special populations postsecondary enrollment and participation in Tech Prep. There is also little evidence of direct transition or delayed entry information regarding special populations students' entry patterns into postsecondary colleges.

Secondary and Postsecondary Profiles

Parker High School and Blackhawk Technical College, both located in Janesville, Wisconsin, were profiled in the report to provide in-depth views of access to and participation in vocational education programming for special populations students. These case studies of secondary and postsecondary programs and services are not intended to represent Wisconsin's vocational education delivery system as a whole, nor are they to be considered as the only "best practice" models within the state. Rather, this information is intended to provide local program level insights, lessons and recommendations for change useful to schools across Wisconsin. Information gathered through informal interviews with staff and students at both the high school and technical college tend to confirm the general findings from the statewide overview.

Parker High School staff supports full integration and access to all classes for all students. School administrators and staff agree that progress in mainstreaming all students with special needs is a strong point of Parker's educational delivery system. Parker High School has a strong special needs program that features inclusion of special needs students in regular and vocational education classrooms. Team teaching, staff development, the implementation of Designated Vocational Instruction (DVI), strong advocacy of special needs staff and committed leadership from the school principal have collectively served to improve special populations access and chances for success in vocational education programming at Parker. Yet while there are many opportunities for special education students to participate in a full range of vocational education programs and services at Parker, there are few specific programs designed to encourage participation in vocational education that are targeted for at-risk students. Most services directed toward at-risk students are aimed to assist students in remaining in school and at improving academic attainment. Existing programs designed to serve at-risk students have little vocational emphasis or content.

Blackhawk Technical College (BTC) offers a number of activities, services, and programs which are designed to provide specific assistance to special populations in earning a vocational diploma or an associate degree. Many of the services provided to special populations students are "up-front" services that help these students upon entry to develop education and career plans, identify individual needs, and provide referrals, remediation or instructional support if necessary. BTC provides assistive technology, in-class services such as interpreters, transition planning for students with disabilities, and financial assistance information to special populations students. BTC is actively involved in recruitment activities at local high schools, and offers several transition programs and workshops for students with disabilities. BTC is working on establishing active articulation with local high schools through the district's Tech Prep initiative, but this effort has not emphasized the inclusion of special populations students. Some of BTC's strongest programs for special populations students include the Non-Traditional Options project designed to introduce women to non-traditional career options, and Womenschool, a program for single parents and displaced homemakers. Enrollment of special populations students is increasing at BTC, particularly the number of disabled and disadvantaged students. BTC sees this growth as placing new demands on their staff and resources at the college's Learning Center and Special Needs Lab. Staff at BTC expressed the need for additional information on "leavers," "completers" and extensive follow-up data on special populations students.

FINDINGS AND RECOMMENDATIONS

This study was based on the premise that access to quality vocational education should not be defined by recruitment, enrollment and placement alone. In determining equity issues in vocational education participation, students cannot be identified as "participating" only by virtue of their enrollment in a course. Head counts don't provide information on what students learn in a program, or what long-term impact that program has on the student's future education and employment. Nor do head counts provide information on effective program practices, quality services or their related impacts. Similarly, graduation rates alone fail to provide essential information on student and program success and completion. Meaningful participation must therefore include consideration of the opportunities students have within programs. Support services and supplementary services must also be recognized as part of the lifeline for special populations students to truly participate and succeed in the "full range of quality vocational education programs and services." Without these resources success for these individuals becomes difficult, and in many cases impossible. Details on student and program outcomes should provide insight into the quality and nature of placement and, if possible, be related to program practices. Evaluating special populations students' "participation" by enrollment figures and "success" by graduation figures alone fails to provide sufficient information about student achievement and the programs which made that achievement possible.

Currently the federal legislation directs states to report participation, graduation and similar general outcomes in their performance standards and measures. Federal requirements and funding drive the data collection system that the state agencies develop, and there are few additional resources available for staff to collect additional data that would provide valuable insight into vocational education services and programs.

In order for policymakers and vocational educators to obtain valuable information on access issues pertaining to special populations students, more needs to be done to extend the vocational education data collection processes and system in Wisconsin. The following recommendations are designed to encourage Wisconsin's vocational education service delivery system to improve existing data collection systems, expand data collection processes and activities, improve program monitoring and extend follow-up reporting to include special populations students, related programs, activities and services. In this way, Wisconsin can continue to provide compliance information to Congress, but also provide local and state agencies with more relevant information on program management, administration and effectiveness of vocational education delivery to special populations students.

Recommendations

1) **Support consistent and reliable data collection processes and reporting for special populations.**

   Wisconsin's Perkins Act Performance Standards and Measures provide necessary outcome information on program participants and services at both the secondary and postsecondary levels. To better understand the outcomes for special populations students, the performance measure data need to be more accurately, consistently and fully collected.

Annual reviews and updates of the data collection processes and measures by both the DPI and the WTCSB would help refine the accountability process and improve the related data collection practices.

Much of the data collected for the performance measures and standards is obtained through the DPI VEERS system and the WTCSB Client Reporting System. The reporting processes used for data collection and the management of these data systems need institutional support for improving the uniformity and reliability of this data. For data to be useful and effective, local reporting practices need to be conducted consistently and reliably -- reducing duplicate reporting practices, simplifying reporting definitions and forms, and introducing easy computerized data collection software would all contribute to more uniform, accessible and reliable state-level data. Wherever possible, vocational education data should be collected and reported by individual special populations categories in recognition of each special population group's unique needs. Further, data should be collected and analyzed uniformly over time, in order to provide extended data about patterns of enrollment, program placement, completion and employment for special populations individuals.

2) **Expand evaluation to include program practices and quality as well as program inputs and outcomes.**

Evaluation that links inputs and practices to outcomes provides a comprehensive picture of service delivery and access for special populations students. More attention needs to be placed on assessing the impact of program practices and processes designed to serve special population students in Wisconsin. To address this need, both DPI and WTCSB are moving to implement more comprehensive monitoring and evaluation practices. The WTCSB has two new assessment systems under development (Basic Skills Education Program reporting and an Institutional Effectiveness Model) which promise to provide additional information on program quality and effectiveness. Similarly, the DPI has required that local grant recipients of Perkins funds submit monitoring reports on provision of programs and services to special populations students. These efforts should be encouraged to ensure that accurate data is collected on students, programs and services and their related outcomes. By including program monitoring of this kind in state-level evaluation practices, Wisconsin will acquire a more complete understanding of vocational education programming for special populations students and will be better equipped to make informed program planning decisions.

3) **Promote inclusion of special populations in Tech Prep and School-to-Work initiatives.**

Access and equity issues in program services provided through the state's Tech Prep, youth apprenticeship and School-to-Work initiatives need to be addressed. These initiatives are high on both the federal government's and Wisconsin's educational agenda; all three efforts are meant to serve **all** students. Yet, in Wisconsin, it is not currently known to what extent these initiatives include diverse and special populations students. Wisconsin needs to incorporate access and equity indicators in the current performance measures and standards for all of these vocational education initiatives. In doing so, Wisconsin will meet the intent of the Perkins legislation and the School-to-Work Opportunities Act and take another step toward a long-term commitment to successful quality vocational education programming for all students.

4) **Focus on program success rather than on student failure.**

It is not clear what opportunities disadvantaged students have to obtain quality vocational education programming in Wisconsin. At the secondary level, disadvantaged students comprise the highest percentage of special populations students enrolled in vocational education, yet they receive relatively few services to help them succeed. It is not known to what extent alternative programs designed to serve these individuals have significant vocational components. At the postsecondary level, an increasing number of disadvantaged students are entering the system unprepared to enter directly into an occupational degree program.

In part, the lack of knowledge about these students can be attributed to an identification problem. A wide variety of state and federal definitions currently exist to identify "at-risk," "low-income," "disadvantaged" and the "hardest-to-serve." There is little uniformity in these definitions and numerous students are "falling through the cracks." Distinguishing these individuals by their failures only leads to the risk of stigmatizing the student and the programs and services designed to help them. Students with exceptional academic and economic needs do not appear to benefit from an abundance of state and federal labels and definitions; merely refining these definitions to identify access or participation in vocational education programming is not the solution. Instead, efforts should be directed toward identifying strong vocational programs and services which exhibit successful practices.

Currently, there is no mechanism in place to review the extent of program content and practices, access and opportunities for disadvantaged students in vocational education. To address these students' equitable participation in vocational education, more should be done to identify the programs, services and supports these youth need to succeed. Existing programs designed to serve disadvantaged students should then be reviewed for their vocational content and opportunities. The resulting information can then be used to inform other schools of promising and effective program practices. In addition, the societal, family and community constraints these students face must be considered as high schools evaluate systemic and institutional barriers that may be inhibiting equitable participation in vocational education. This requires a shift in emphasis from looking at only student enrollment and basic outcomes, to addressing school-based indicators of equitable, effective, quality program delivery.

5) **Study the impact of concentrating federal Perkins funds to areas with a high incidence of special populations students.**

The reauthorized Carl D. Perkins Vocational and Applied Technology Education Act of 1990 targets funds to localities and programs which serve high concentrations of special populations. Wisconsin's vocational education agencies appear to be fairly targeting these funds, satisfying the criteria of size and scope. However, there is no definitive information on the quality of the programs receiving funding, or how they are improved with the help of these additional resources. In addition, little is known about what happens to districts, schools and programs which effectively "lose" funding under this new structure. Programs and schools which serve relatively smaller numbers of special populations students may be adversely effected due to the loss of resources. A study should be conducted to address the following questions: What are the benefits of concentrating funding to areas with a high incidence of special populations? Is there an adverse impact on schools and districts with moderate to low numbers of special populations groups which "lose" funding?

6) **Develop follow-up reporting procedures for special populations students.**

Wisconsin's leading vocational education agencies need to form more detailed follow-up reporting on special populations members. Follow-up data can provide valuable information on what happens to vocational education students after they complete or leave a program, secondary school or technical college. Detailed follow-up reporting can provide information on economic self-sufficiency, independent living and the nature and quality of employment. Follow-up information should be reported in detail by special populations categories, as special populations students have unique program and service needs as well as unique employment and living needs. Further, completion data for special populations students should recognize student-based competencies gains and course completion as an additional measure of "success" and program impact. Follow-up results can help educators and policymakers understand the linkage between effective program and service provision and related outcomes only if enough detail is provided to accurately attribute students outcomes to program practices.

INTRODUCTION

Purpose

The Carl D. Perkins Vocational and Applied Technology Act of 1990 (P.L. 101-392) requires that states act to improve selected vocational programs and services for all segments of the population. In particular, the revised act directs funds to improve vocational education programs and services in districts and sites that have high concentrations of special populations. The Perkins legislation defines five specific groups as special populations:

1. Individuals with disabilities
2. Educationally and economically disadvantaged individuals
3. Individuals with Limited English Proficiency
4. Individuals participating in programs designed to eliminate sex bias
5. Individuals in correctional institutions

Under the revised act, Section 118 requires states to identify and provide equal access to recruitment, enrollment and placement activities for special populations. Further, Sec. 118 (2) charges:

> . . . individuals who are members of special populations will be provided with equal access to the full range of vocational education programs available to individuals who are not members of special populations, including occupationally specific courses of study, cooperative education, apprenticeship programs, and to the extent practicable, comprehensive career guidance and counseling services, and shall not be discriminated against on the basis of their status as member of special populations . . .

The Act provides funding for vocational education programs and services for secondary, postsecondary and adult students. The Act requires states to monitor programs to ensure equal access to members of special populations, and under Section 112 d (8), state councils are required to ". . . report to the state board on the extent to which the individuals who are members of special populations are provided equal access to quality vocational education programs."

This study is produced by the Wisconsin Council on Vocational Education to fulfill the state council requirements to report on special populations' access to quality vocational education in the state of Wisconsin. This study examines access issues for students who are members of special populations in secondary and postsecondary vocational education programs. The research was conducted by the Center on Education and Work at the University of Wisconsin in Madison, Wisconsin.

Framework

The framework of this study focuses on **access**. Access is defined primarily as indicated in the Perkins Act -- to include recruitment, enrollment and placement of special populations in vocational education programs and services. In other words, access includes what happens

before and during program participation. For this study, emphasis is placed on program participation rather than program outcomes. The study attempts to identify effective program practices that encourage a full range of vocational education programs and services for special populations. Partly inspired by the recent attention given to the School-to-Work Opportunities Act, this study also includes a review of transitional linkages between secondary and postsecondary vocational education programs and services for special population youth in Wisconsin.

The study reviews both secondary and postsecondary vocational education efforts/programs serving special populations. *The evaluation is not limited to Perkins funded programs only, as the Perkins Act requires access for special populations to the full range of vocational education programming, and not all vocational programs and services to special populations are Perkins funded* (CPA, 1990. Section 118(2)).

In determining access for special populations to **quality** vocational education programs and services, potential quality components of vocational education for special populations were obtained through a review of recent studies in the field. Specific studies reviewed include research which identifies effective quality vocational education components for special needs students (Phelps & Wermuth, 1992), a report on designing performance measures for Perkins funded programs (Hoachlander, 1990), and evaluation reports by the National Assessment of Vocational Education (NAVE) which focus on access issues for special populations in Perkins-funded programs.

The main target groups include individuals with disabilities, educationally and economically disadvantaged individuals, and individuals with Limited English Proficiency. Individuals participating in programs designed to eliminate sex bias are discussed to the extent that information is available. Individuals in correctional institutions are not discussed in this study. Current information on individuals in Wisconsin's correctional institutions participation in vocational education can be found in the 1992 WCOVE report: *A Follow-up Study of Graduates From the VTAE Vocational Approved Programs in Wisconsin Correctional Institutions*.

Research Design

The study consists of two parts. First, a statewide overview of special populations in vocational education programs and services at the secondary and postsecondary levels is presented. Information on Wisconsin's vocational education delivery system was obtained from the Department of Public Instruction (DPI) and the Wisconsin Technical College System Board (WTCSB). Patterns of enrollment, participation, and completion are assessed with available information. Where possible, a report on statewide trends of special population participation is made.

Second, a qualitative study of the local level vocational education service delivery systems is presented. One technical college and one high school are profiled. Site selection was based, in part, on evidence of a full range of quality vocational education programs and activities that serve special populations. Site selections included secondary and postsecondary examples of comprehensive and effective vocational education programs and services. The case studies are not intended to represent Wisconsin's vocational education delivery system as a whole. Rather, the qualitative section of the evaluation is intended to provide an in-depth look at examples of current vocational education programming for special populations at the local level.

School-based information and student-based information on special population access to quality programs and services was collected and analyzed. Transition services in each institution were also reviewed. In addition, the research team profiled several successful practices and potential improvements. In particular, consideration was given to the strengths and weaknesses of these programs in providing special populations access to quality vocational education. Taken together with the statewide overview, this information is used to present recommendations for change useful to schools across Wisconsin.

Information was obtained locally through a series of focus groups, on-site interviews and data collection. The focus groups were conducted by staff from the Center on Education and Work. School personnel (teachers, counselors, coordinators and administrators) completed program and student data surveys and participated in a semi-structured, interview-format focus group session. Vocational education students, including special needs students, were interviewed individually. The focus group and interview questions were designed to assess each group's perceptions of the school's or college's vocational education programs and services for special populations.

The aim of the study is to provide insight into current program practices and help identify potential unmet needs in access to quality vocational education programs and services for special populations in Wisconsin. In using a combination of qualitative and quantitative information, the study will ideally provide a range of breadth and depth that will inform the future development of practices and policy within Wisconsin's vocational education programs for special needs students.

SECONDARY VOCATIONAL EDUCATION PROGRAMS IN WISCONSIN

This section of the study presents a statewide overview of activities, programs and services for secondary-level special population students in vocational education. Wherever possible, the most current information available is reported. The majority of information in this section was supplied by data sources, publications and interviews with staff from the Department of Public Instruction (DPI).

The overview begins with a review of Wisconsin's secondary vocational education delivery system, including program administration, funding sources, policies and guidelines, as well as monitoring and evaluation practices. In the second section, the full range of Wisconsin's quality vocational education services and programs are reviewed with an emphasis on special populations access and participation. This section covers new and emerging vocational programs such as Tech Prep and Youth Apprenticeship, support services, guidance and counseling, and School-to-Work Transition. The third section of the overview provides information on state-level patterns of access. General trends in recruitment, enrollment and participation are discussed first. Then, each special population group is examined individually, and identification issues and specific program and services issues related to each target group are discussed. The last two sections cover attrition, graduation, follow-up and performance measures and standards outcomes. Finally, the secondary overview findings are summarized.

PROGRAM ADMINISTRATION AND FINANCIAL SUPPORT

Program Administration

Wisconsin's Department of Public Instruction (DPI) and the Wisconsin Technical College System Board (WTCSB) jointly develop a state plan for the use of federal Perkins Act funds awarded to Wisconsin. In 1990, a three year plan was developed based on existing reports which served as the first statewide needs assessment. The needs assessment was also used to develop specific goals for secondary and postsecondary vocational education which became the basis for the funding guidelines issued annually to the local schools and technical college districts. the guidelines are developed and produced by the WTCS and DPI independently, detailing which programs and services may be funded.

At the secondary vocational education level, the initial needs assessment helped to determine the need to improve the technical preparation of Wisconsin youth and the need for increased collaboration between educators in local settings. In addition, the Perkins legislation mandates that all recipients of federal funds use those funds to provide programs that integrate academic and vocational-technical education in a coherent sequence of courses so that students achieve both academic and occupational competencies. In the approved state plan, the identified state needs and the Perkins requirements were merged to emphasize the improvement of vocational education programs, with the full participation of special populations by:

> "*. . . conceptually framing the use of Carl Perkins funds around the School-to-Work Transition and concentrating resources on promoting and developing Tech Prep and Youth Apprenticeship options*" (WBVTAE, 1991).

Therefore, in Wisconsin, during the first cycle of the revised Perkins legislation (including FY 91 - FY 93), secondary vocational education funding emphasis was placed on program improvement directed toward Tech Prep, Youth Apprenticeship and other School-to-Work Transition projects.

Equitable participation is considered by the DPI to an additional emphasis of the Act. To address this emphasis, the DPI stipulates that eligible recipients of funds awarded for program improvement must ensure the full participation of special populations. In compliance with the Perkins Act regulations, awards are prioritized to school and programs that serve the highest concentrations of special populations.

In 1991, the DPI established five program improvement goals for the use of secondary vocational education assistance funds:

1. To provide Tech Prep and Youth Apprenticeship options to all people and groups equally and without discrimination.
2. To develop Tech Prep and Youth Apprenticeship options that continually and systematically respond to the trends and demands of the marketplace.
3. To amplify and expand the "whole persons" concept of education within Tech Prep and Youth Apprenticeship options.
4. To evaluate and extend standards of excellence in classroom and laboratory instruction within Tech Prep and Youth Apprenticeship options.
5. To provide and cultivate strong partnerships in the total education system and with business, industry and labor (WBVTAE, 1991).

Goal 1 specifically addresses access and services to special populations groups. DPI has detailed four related objectives to describe Goal 1 as part of the formula distributions requirements:

1. To develop and implement broad-based curriculum and instruction that is directed toward meeting the needs of an increasingly more diverse student population, utilizing DPI guides, standards and materials.
2. To assess and identify the career interests of individual students and provide career counseling resulting in access to educational and career programs related to student interest and proficiency.
3. To provide students with a wide variety of training and experiences (resulting in better educated, more fully developed members of society).

4. To provide equal opportunity and support services for learners in special populations and minorities to succeed in the total vocational education program (DPI, 1994b, p. 94).

In the 1993 *Wisconsin Secondary Annual Performance Report*, achievements by high schools which addressed the four objectives were reported. In FY 93, 286 high schools received Perkins funding. In addressing Goal 1 and its related objectives directly, 153 of these high schools used the federal funds for planning, 202 for developing and 183 for implementing services or activities for improving access.

In 1993, the DPI conducted an additional Carl Perkins Needs Assessment Survey of the state's high schools which specifically related to criteria set out in Section 116 and Section 113 of the Perkins Act (See Appendix A). The survey was completed by 78% of Wisconsin high schools. Based on the results of the survey, the DPI has reaffirmed the original five goals, but the local eligible recipients of Perkins funds are directed to place an emphasis on Goals 4 and 5 for the 1994-95 funding year. These two goals promote evaluating and extending standards of excellence in instruction, supervised experience and student organizations, along with the need for increased collaboration between educational systems, business, industry and labor, and between education in local settings.

Wisconsin's *1994-95 Project Applications Guidelines* is a comprehensive planning guide for Carl Perkins Act applicants that covers all aspects of project planning, budget, assurances of program provision and evaluation. The document requires that each district applicant submit a local plan with project initiatives. The RFP requires districts to include commitments to meet the individual needs of special population students, such as inclusion of assurances to address non-discriminatory assessment, non-discriminatory recruitment efforts, provision of supportive services/devices, and to meet all of the Section 118 provisions of the Perkins legislation (See Appendix B). These planning requirements meet the intended purpose of the Carl Perkins legislation, and assure that districts receiving funds intend to include special populations in the full range of vocational education activities and services funded under the Perkins legislation.

Evaluation, Monitoring and Performance Standards

In the FY 94-95 planning guidelines for the Perkins RFP process, DPI has initiated a formal, three-fold system of accountability. The system includes the State Measures and Standards, the State Assurance Monitoring and the Local Evaluation Plan. In the RFP, DPI requires each applicant to submit a Local Equity Plan and a Project Evaluation Plan. State assurance and accountability monitoring consists of 4 parts:

> *Project application and review process* in which DPI reviews special population enrollment documentation; assesses interface and coordination with other relevant groups and/or agencies (i.e. JTPA, Education for Employment, parents of special populations, and CBOs); assures that Sex Equity needs are met; reviews district rationale for providing services to high concentrations of special populations in programs and services of sufficient size, scope and quality; checks integration of

> academic and vocational education; and analyzes assurances for equitable participation consistent with Section 118 of the Perkins Act (DPI, 1994b).
>
> *Measures and Standards* from each district's District Profile Report will be reviewed. The current reporting year's performance will be checked against the standards and measures and against the previous year's performance. Local program improvement plans will be required of any district that does not comply with one or more of the performance standards and measures. For example, if a district fails to provide sufficient supplementary services to individuals who are members of special populations, that district must submit a local program improvement plan to propose strategies for improving the provision of these services DPI, 1994b, p. 122).
>
> Equity plans must be filed by every district. These plans include district policies that related to programs, services and activities designed to eliminate sex bias, stereotyping and discrimination. The plans detail equity status, equity goals, and equity outcomes to be met. The plans must also include descriptions of planned equity activities, coordination of equity plans with other school improvement efforts, and evaluation of progress toward equity goals (DPI, 1994b).
>
> *Fiscal Reports* are also required for each approved project. The project budgets will be monitored by the Federal Aides and Audit Section of the DPI. Budgets will be reviewed to ensure that they meet the intent of the project goals, that any modifications are consistent with the project budget and that expenditures are consistent with the intent of the law (DPI, 1994b).

The above assurances and monitoring processes were developed in response to a Federal monitoring of Wisconsin's implementation of the Carl D. Perkins Act conducted in 1992. An additional feature of interest to this report is that in FY 95 all recipients of Perkins funds will be required to submit a project evaluation plan that included monitoring of provision of services to special populations. To assist in monitoring, the DPI has included in the 1994-95 Guidelines a comprehensive set of questions related to on-going access and provision of services. The document also suggests which on-site records and sources are needed to provide relevant information. This information promises to provide some statewide information on program practices as well as outcomes.

Financial Support

In Wisconsin, Perkins funds are received by the WTCS State Board, and then are allocated as follows: 45% goes to the DPI for secondary vocational education programming and 55% remains with the WTCS for postsecondary vocational education programs. Secondary vocational funds received under the Perkins legislation are distributed through a federal formula based on the proportion of state Chapter I program dollars received, the number of EEN students with IEPs, and the number of students enrolled by local educational agencies (LEA) in the previous year. In this way, funds are concentrated to areas with a high incidence of special population groups. Under the revised Perkins legislation, 8.5% of the Title II funds are channelled to state programs which promote professional development, curriculum development, and assessment. Programs for single parents, displaced homemakers, single pregnant women, sex equity programs and programs for criminal offenders receive 11.5% of the Title II fund through an RFP process. Overall, an amount equal to 75% of the Title II monies goes to secondary, postsecondary and adult education programs.

Formula fund grants are awarded to local consortia, consisting of CESA district or school districts that jointly address common program improvement needs. Prior to the 1990 Perkins legislation, the DPI awarded relatively small grants (average grant size for schools was approximately $9,650, and Title IIB program improvement grants averaged $3,000 to a large number of school districts and CESAs. Most of Wisconsin's 430 high schools received grant monies (Ellibee and Phelps, 1993).

Under the 1990 reauthorized Perkins legislation, entitlements have been replaced by targeted funding and state agencies cannot award grants that are less than $15,000. For FY 1994, 91 projects serving 286 schools received total funding of $2,623,270 (or approximately $9,000 per high school) through consortia grants. The average amount requested by consortia was $65,582. The smallest award granted was $17,291, shared by two high schools. The largest grant awards went to seven CESA districts (service a total of 162 schools received monies) with amounts ranging from $85,153 to $287,900 (*DPI, 1994, FY 94 Consortium Analysis*).

Under the reauthorized Perkins legislation, the amounts of the grant awards to Wisconsin consortia have increased, in part, because the awards are directed by federal requirements toward programs and services of "sufficient size, scope, and quality as to be effective." However, while each of the 91 projects is receiving an average of $28,827, each of the 286 schools receiving monies through the consortia in FY 94 is receiving on average of only $9,000. This means that well over 140 Wisconsin high schools have effectively "lost" funding under the Perkins reauthorization and redistribution of funds. At this time it is not known what effect the concentration of funding has had on consortia schools receiving funds. Nor is it known what possible adverse effects the loss of funding is having on the ability of non-consortia schools to maintain quality vocational education programming for special populations students. Further research is needed to understand the impact of targeting Perkins vocational education funding to districts and programs with high concentrations of special populations students.

The federal Perkins contribution amounts to only a small percentage of the total funds spent on secondary vocational education in Wisconsin. Approximately 5% of Wisconsin's vocational education funding comes from Carl Perkins grants awarded to the state (Ellibee & Phelps, 1993). Secondary vocational education programs and activities are funded primarily through state school funds and local property taxes. There are additional federal sources of revenue for programs and services for special populations groups. For example, students with disabilities are served through funds from the Individuals with Disabilities Education Act (IDEA) which provides approximately $300 per student. At-risk high school students (which include academically and economically disadvantaged students) are served in part through Chapter I (although most of these funds are dispersed at the elementary school level), Chapter II, JTPA and state grant programs such as the Youth Initiative. However, Perkins funding is still the chief revenue source for financing vocational programs and services for disadvantaged students in Wisconsin.

Table 1 shows that the secondary share of federal vocational education appropriation for FY 94 (with similar distribution expected for FY 95 and FY 96) totaled $8,545,248. Of this amount, $6,400,304 went to Local Project Funds, all of which must assure equitable participation to special populations. Of interest to this study on special populations are the amounts directed toward: remedial courses ($225,115), adaptation of equipment ($514,599), and supplementary services (curriculum modification, equipment modification, classroom modification, supportive personnel, and instructional aids and devices) for special populations ($1,157,848). These awards serve, respectively, the needs of the academically disadvantaged, individuals with disabilities, and all members of targeted special population groups.

Under Title IIIE, WTCS and DPI jointly administer Wisconsin's Tech Prep Initiative. Wisconsin's Title IIIE Tech Prep grant amounts to $2,089,121, of which $1.6 million is set aside for local projects and the balance is allocated to statewide coordination, dissemination and professional development. Each of the 16 consortia receive a $70,000 basic grant and a formula allocation based on the number of tenth grade students enrolled in the VTAE district (DPI, 1994b, p. 186). While this distribution tends to concentrate funds to urban areas, there is no targeting of Tech Prep funding based on the incidence of special population members. It is important to note, however, that many of the Local Project Funds (which are targeted to high concentrations of special populations) were also used for Tech Prep, Youth Apprenticeship and School-to-Work activities, as these initiatives were the major focus of the DPI goals.

Table 1

Wisconsin's FY 94 Funding Allocation for Secondary Vocational Education
1990 Carl D. Perkins Vocational and Applied Technology Act

Title II	FY 94 *
Basic State Grant (DPI share)	$ 8,545,248
5% Administration (Includes equity)	426,687
8.5% State Leadership	725,369
7.5% Single Parent	640,029
3% Gender Equity	256,012
1% Incarcerated	96,847
75% Local Project Funds	6,400,304
Upgrading curriculum	1,157,848
Equipment purchase, including instructional aids	1,157,848
Inservice for voc. ed. and academic instructors working with voc. ed. students for integrating academic and voc. ed.	1,157,848
Guidance and counseling	514,599
Remedial courses	225,115
Adaption of equipment	514,599
Supplementary services for special populations	1,157,848
Special populations coordinator	0
Apprenticeship programs	514,599
Programs tied to state economic development initiatives	0
Adult training	0
Mentor programs in higher education institutions	0
Private Sector provisions	0
Title III	
Community-based organizations	104,477
Consumer Homemaking Education	305,764
Full-time state administrator	18,346
Tech Prep education programs	2,089,121

* Allocation funding amounts for FY 95 and FY 96 are projected to be the same as for FY 94.

(Source: Wisconsin Department of Public Instruction, Table B, Secondary Funding Table, 1994)

POLICIES, PROGRAMS AND SERVICES FOR SPECIAL POPULATIONS

New and Emerging Vocational Programs

Tech Prep, Youth Apprenticeship and a number of School-to-Work Transition programs comprise most of the new vocational programming available to secondary students in Wisconsin.

School-to-Work

School-to-Work initiatives in Wisconsin began in 1985 with the advent of Wisconsin's K-12 Education for Employment. This legislation required that all Wisconsin students have access to education for employment classes which provide:

- Wisconsin Educational Standard, Developmental Guidance Services, Wis. Stat. 121.02 (1) (e)
- Wisconsin Educational Standard, Curriculum, Wis. Stat. 121.02 (1) (k)
- Wisconsin Educational Standard, Education for Employment, Wis. Stat. 121.02 (l) (m)
- Tech Prep, Wis. Stat. 118.34
- Youth Apprenticeship, Wis. Stat. 101.265 (Wisconsin DPI, 1994a)

Currently, School-to-Work activities cover a wide range of programs, services and activities. School-based learning focuses on applying core academic skills; developing integrated and applied curriculum; setting high academic standards; learning to set goals based on skills, interests and aptitudes; integrating career development; and providing postsecondary enrollment options. Many of these strategies are integral to the statewide Tech Prep and Youth Apprenticeship initiatives, of which more detail is provided below.

Work-based learning options include Youth Apprenticeships (see below), community service, co-ops, in-school work experience, internships, mentorships, and job shadowing. The DPI collects information on students who participate in three areas of work-oriented learning options: In FY 93, 3,983 students participated in co-op programs, 1,880 in supervised occupational experiences, and 8,150 in school-based work simulation (DPI, VEERS data, 1994). Currently, data is not collected to determine what percentage of these students are members of special populations groups. It is also not known how many students are participating in many of the other work-based learning options, or what percentage of those students are members of special populations. Wisconsin has received a federal planning grant from the School-to-Work Opportunities Act, and as work-based options for learning are emphasized as a major component, more information on participation in work-based activities should be forth coming in FY 94 and FY 95. The evaluation will also be designed to assess special populations students enrollment and participation in the broad range of School-to-Work activities in Wisconsin.

Tech Prep

The Tech Prep initiative in Wisconsin is a statewide effort to upgrade the skills of Wisconsin youth by providing a sequence of applied and integrated occupational and academic courses with the intent that the secondary student will continue on to postsecondary education.

Wisconsin's technical college and K-12 public school systems are equal partners in the statewide Tech Prep initiative. There are 16 consortia, each consisting of an area technical college, K-12 public schools (within the VTAE district), and Tech Prep council members, assigned to plan, develop and implement Tech Prep locally. A major share of Wisconsin's federal vocational funding is currently being directed toward the planning, development and implementation of Tech Prep. Tech Prep is not a singular program in Wisconsin, but a statewide initiative which embraces a broader range of programs and activities than specified in the federal definition of Tech Prep. Wisconsin uses the following operational definition for Tech Prep:

> *Cooperation between K-12 schools, technical colleges, universities, and the business, labor, and community to develop applied and integrated academic and technical curriculums which provide a coherent sequence of courses and experiences designed to provide high school graduates with a more technically oriented background leading toward the goal of successful transition from school to postsecondary technical education or to work* (DPI, 1994c, p. 2).

In the annual Carl Perkins' *Project Application Guidelines* produced by the DPI, Tech Prep is emphasized as the major vocational education effort receiving funding under the Perkins legislation. Three of the DPI's five stated program improvement goals are directed at Tech Prep options. As cited above, Goal 1 specifically requires recipients "to provide Tech Prep and Youth Apprenticeship options to all people and groups equally and without discrimination" (DPI, 1994b, p. 10).

An analysis of the 1993 Tech Prep Consortia proposal goals shows that only four consortia directly address access to Tech Prep initiatives for special populations. All four of these consortia planned to develop strategies for recruiting and meeting the needs of minority and special population students. Two of these consortia planned to develop recommended policies to ensure that the needs of all students are met, and three of the four planned to review developed curricula and support materials to ensure gender equity. Further, three of the four planned to review all materials to ensure they were bias free. The other 12 consortia have a full range of goals and objectives for Tech Prep implementation, but do not specifically mention recruitment, inclusion, or placement of special population students in their plans.

Special populations equitable participation is also one of the 14 Tech Prep Performance Measures adopted by the State Tech Prep Management Team and the Tech Prep Leadership Group. Performance Measure #6 reads:

> *Increasing equitable rate of participation of special populations in high school or technical college vocational education programs. The expectation is that the participation rate of special populations will be greater than or equal to the participation of the school district's general population in vocational education (k-12 and VTAE)* (DPI, 1994c, p. 9).

In addition, Performance Measure #5 directs an increased balance of participation by gender within vocational education high school and technical college programs.

However, as reported in the 1993 Tech Prep Performance Measure Summary, data on special populations access is uninterpretable. This problem can be attributed to difficulties in establishing uniform descriptions and measures of Tech Prep courses, activities and students; this in turn confounds processes for establishing consistent data collection. In recognition of this problem, WTCS and DPI are working jointly to revise and improve processes for data collection which should be implemented in future Tech Prep Performance Summaries.

Similar problems exist with the DPI's VEER data on Tech Prep. In Wisconsin's Tech Prep initiative, students are not identified as "Tech Prep Students," therefore an accurate secondary school level analysis of Tech Prep participation is difficult. Currently, any student who participates in "a coherent sequence of courses" and intends to continue at a postsecondary technical institution is considered to have elected to pursue a "Tech Prep Educational Pathway." Of the 100,025 students in grades 11, 12 and 13 counted in school year 92-93, 17,968 are listed as being in a Tech Prep Educational Pathway (DPI, VEERS data, FY 93). However, not all these students were actually taking vocational education or Tech Prep courses in FY 93 (presumably a necessity for Tech Prep participation. Apparently, some schools count students as participants in this pathway who have merely expressed a desire to continue their education at a technical college. Inconsistencies in counting and reporting methods appear when other reports are examined. For example, other data from Wisconsin DPI FY 92 IIC VEERS indicated that only 6,947 students are enrolled in Tech Prep across the 16 consortia areas. The DPI's current data suggests that the identification of Tech Prep participation at the secondary level is not consistent statewide. Some high schools identify Tech Prep students by participation in a sequence of courses with vocational content, while some high schools count the intention of a student to continue at technical college as an indication of Tech Prep participation.

Because there is little uniformity in the types of Tech Prep activities students are participating in, and because the reporting of Tech Prep participation varies from district to district, it is difficult to draw any conclusions about Tech Prep enrollment at the secondary level. Currently there is insufficient data available to identify how many students are participating in Tech Prep at the secondary level or are continuing on to postsecondary education and/or work. Unfortunately, this incomplete data also includes special population students. It is not known how many special populations students are actually participating in Tech Prep courses and activities in Wisconsin's high schools. Not until procedures are in place to ascertain overall Tech Prep enrollment and participation will it be possible to determine the level and nature of special populations' access to Tech Prep.

Youth Apprenticeship

In FY 93, only .1% of high school students enrolled in vocational education courses were participating in Youth Apprenticeship programs. In January 1994, 121 students were enrolled in Youth Apprenticeship programs across the state. Of these, 43% were female and 11% were members of ethnic minorities. Data is not collected to determine special population participation. Staff at DPI noted that of the 121 students currently enrolled, there are no students with identified disabilities, and while there are some at-risk students participating in the program, precise enrollment information was not available. In FY 95, Wisconsin's Youth Apprenticeship enrollment is expected to increase four-fold, serving 400 students in thirty local programs (DILHR, 1994).

Support Services

At the secondary level, Perkins funds are used in local projects to fund four primary areas: upgrading curriculum, equipment purchases (including instructional aides), inservice training for vocational and academic instructors for integrating vocational and academic courses, and supplementary services for special population (DPI, 1994e). In this way, the DPI tries to fulfill the dual purposes of improving programs and serving special populations in overlap with the general support services offered in high schools such as guidance counseling and assessment. This makes it difficult to tell where support services which assist special population in accessing vocational education begin and end. Therefore, this report focuses on Perkins funds targeted to assist students (including special populations students) to enroll, participate and succeed in vocational education programming.

The 1993 Carl Perkins Needs Assessment Results (DPI, 1994b) details findings of support services provided to assist special populations. The needs assessment yields evidence that Wisconsin's high schools are providing at least minimal levels, and in many cases, substantial levels of program improvement and services to special population students. The needs assessment identifies nineteen support services as the most frequently provided services specifically designed to assist special population members in successfully completing their chosen education program. The most frequently provided services reported are presented in the table below.

The shaded cells in Table 2 indicate the support service categories that high schools most often provide. The table illustrated that more high schools provide services to students with disabilities than to any other special population group. In all but three categories, the percentage of high schools reporting support services was highest for students with disabilities. The concentration of services to students with special needs may be attributed to their exceptional needs for a wider range of services. Many of these services are required under the IDEA in order to ensure students with disabilities obtain an appropriate public education. Also, it is possible that these services are more frequently offered to this group because schools may jointly fund these services with federal monies received through the IDEA or DPI special education funding.

Table 2 also indicates that high schools provide relatively few services to the academically and economically disadvantaged target group comprises 26.7% of students enrolled in vocational education in Wisconsin. Students with disabilities account for 8.1%, and LEP students account for .6% of vocational education enrollment. Clearly, the disadvantaged population represents the largest special population group enrolled in vocational education programming. However, it is not clear that this group receives a proportionate amount of support services designed to assist them in succeeding in vocational education programs.

Table 2

Percentage of High Schools Providing Support Services to Special Populations Groups Enrolled in Vocational Education

SUPPORT SERVICES	DISABLED	ACADEM. DISADV.	ECONOM. DISADV.	LIMITED ENGLISH PROFIC.	SINGLE PARENTS	SEX EQUITY
Tutoring	**25**	**26**	17	10	16	4
Notetaking/recording	**35**	**27**	15	8	12	4
Instructional Aides Paraprofessionals	**40**	23	14	10	11	3
Reduced class size	**37**	**28**	12	9	12	2
Remedial instruction	**30**	**29**	16	10	13	3
Special adaptive equipment/devices	**67**	17	6	3	5	2
Special adaptive materials/supplies	**42**	23	13	10	10	2
Lab fees and supplies	19	**26**	**40**	8	14	3
English as a second language	13	12	9	**52**	10	4
Interpreter	**42**	9	5	**35**	6	3
Special populations coordinator	**28**	23	16	9	17	7
Mentoring	**26**	25	17	8	18	6
Support groups	24	22	18	8	23	5
Dependent care	23	7	13	1	**53**	2
Transportation	**39**	17	16	8	16	4
Supplemental assess. services	**37**	24	15	8	13	3
Special placement/ transition service	**41**	22	15	6	14	3
Designated voc. instructor	**36**	24	16	7	12	5
Adapted curriculum testing	**36**	25	13	9	14	3

(Source: Carl Perkins Needs Assessment, DPI, Bureau for Vocational Education, 1993)

* Shaded areas indicate the support service categories which more than 25% of the reporting high schools provide.

Guidance and Counseling

In the 1993 Wisconsin Secondary Annual Performance Report, Wisconsin high schools reported to the DPI on the kinds of guidance and counseling activities accessible to vocational education students. Out of 436 high schools in the state, 282 have developed Wisconsin Developmental Career Guidance Model (WDGM) competencies and/or are working on the development of a level 3 WDGM implementation plan (see below for more information on WDGM). Professional development activities for counselors were conducted by 319 high schools, and 297 schools reported activities and services to assist students in the transition to Tech Prep. It is not known how these services targeted and served special population students.

Many Wisconsin high schools integrate multiple guidance services under the Wisconsin Developmental Career Guidance Model (WDGM). The services are delivered by school counselors, staff, parents, business and industry representatives and community members. The model is based on the developmental needs of the student from kindergarten through high school. WDGM promotes on-going counseling and guidance which focuses on three areas: personal/social, career, and education. By emphasizing the developmental needs of the students, this program individualizes counseling, potentially offering greater services and accessibility to the special populations student. The WDGM model is not legislated in Wisconsin, but is recommended by the DPI.

In 1992, a subcommittee of the Governor's Cabinet for a Quality Workforce proposed a system of guidance and counseling support services which includes the following components:

- Career Awareness
- Hands-on Career Exploration
- Individualized Career or Educational Plan for all Students
- Labor Market Information
- Restructured Educational Delivery
- Integrated Developmental Counseling
- Assessment and Re-evaluation of Choices

This system would be delivered by schools and community-based career counseling and information center housed in the state's existing Job Center network. The Job Center network is a consortium of local agencies that coordinate services to benefit employers and job seekers. By housing these services at one location or linking services via computer networks, Job Centers help individuals receive information and services designed to meet their needs. Twenty-two regional Job Centers are in existence in the state and three additional communities have been granted awards to operate community-based counseling centers beginning in the fall of 1994 (DILHR, 1994). While this system promises the potential of reaching more students with a broader range of career information and services, it is not clear how students in general and special needs students in particular will access a regional center that is not located in the high school.

Counselors plan several roles in enhancing special populations individual's access to vocational education. Counselors assist all students by providing information to them and their parents about vocational education course enrollment and options through career day events, brochures, outreach activities and individual consultations. Counselors also conduct career aptitude and interest assessments, assist students with career awareness and planning and course scheduling, and provide guidance and support. The Carl Perkins Needs Assessment reveals that a majority of high schools have the following career development strategies in place or planned:

- Career Interest Assessment
- Career Aptitude Assessment
- Career Resource Center
- Educational Advisement
- Career Counseling
- Computerized Career Information System
- Career Days/Fairs
- Job Shadowing
- Career Exploration Integrated in Curriculum
- Community Resource Speakers
- Field Trips to Business/Industry/Technical Colleges
- Career Exploration Courses

Only two strategies, support groups for non-traditional career students and mentoring of students by business/industry personnel, are not planned by the majority of high schools responding to this survey. Many of the above services, such as interest and aptitude assessments, are specifically modified to accommodate special population students' individual needs and disabilities. However, little is known about the quality and intensity of the services provided, how they are modified, what accommodations are provided, or how students with multiple needs are served.

Other, more specialized services, are provided through guidance and counseling to assist special populations in gaining access to vocational education programs and related services. Counselors may participate as members of multi-disciplinary teams (M-teams), which determine student eligibility for special education. Counselors are also invited to participate in student's individualized education program (IEP) meetings with parents, staff and students to determine individualized services to meet the disabled student's unique needs. Unfortunately, counselors are not required to participate at either of these meetings, and it is not known how frequently they participate.

There is little information available on how many special populations students are receiving guidance and counseling services related to vocational education participation. Although districts which receive Perkins funds are required to submit a detailed plan and assurances for provision of counseling services and non-discriminatory assessment, little follow-up is done to learn if these practices were implemented. Further, we know little about which service provisions are most effective and have a positive impact on equitable participation in vocational education. To address this need for information, the DPI has established a monitoring system which will evaluate counseling and assessment services for special population vocational education students that will be effective in the 1994-95 school year.

PATTERNS OF ACCESS

Recruitment, Enrollment, and Placement

Recruitment

Efforts to recruit special populations students, or more specifically, to inform them of their vocational education options, are monitored by the DPI and reported in the Perkins Annual Performance Report. High schools report on the following recruitment achievement:

> *Information provided to special population students and their parents concerning the opportunities available in vocational education at least on year before the grade level in which the vocational education programs are available together with enrollment requirements and special services available* (DPI, 1994f, pp. 22-24).

Recruitment achievements are reported for each special population group. In FY 93, 373 of a total of 436 high schools in the state, reported meeting this achievement for students with disabilities, 224 for LEP students, and 353 for disadvantaged students (DPI, 1994f, pp. 22-24). Further information on recruitment activities statewide is not collected at this time.

Enrollment

Nationally, secondary vocational education enrollments have been declining over the last decade. The 1994 National Assessment on Vocational Education Interim Report to Congress found that students nationwide are taking fewer vocational education courses and that there are fewer teachers and staff employed, despite an increasing secondary student population (Office of Educational Research, 1994). Staff at the DPI report that Wisconsin has experienced a similar decline in the numbers of vocational education programs and courses offered over the last five years. This trend is attributed by staff at the DPI to the onset of Wisconsin high school graduation requirements which have an increased academic emphasis and may also be associated with increased academic entrance requirements mandated by universities and colleges. The extent to which these requirements are influencing vocational education participation is not known, but they have had an impact on the number of vocational education programs and courses offered in Wisconsin.

Based on the FY 92 VEERS data and the Wisconsin Standards and Performance Measures, DPI estimates that 34% of the general student body statewide are members of special populations groups, and 36% of students participating in vocational education are members of special populations groups (DPI, 1994b, p. 90). This suggests that in Wisconsin special populations are represented in secondary vocational education at only a slightly higher percentage than their incidence in the high school population. This contradicts the NAVE (1994) finding that special population students are heavily concentrated in vocational education programs:

> *. . . special population students appear to be disproportionally concentrated in vocational education. Preliminary NELS data demonstrate this succinctly: While 34 percent of the class of 1992 were special population students (disabled, disadvantaged, or LEP), 43 percent of the vocational credits earned by this class were earned by special population students* (Office of Educational Research, 1994, p. 105).

A more specific breakdown of enrollment patterns of Wisconsin's special populations in secondary vocational education is provided by DPI's 1993 State Needs Assessment Results (DPI, 1994b). The data presented represents information obtained from 351 of 438 districts with high schools in Wisconsin (a survey return rate of 78%). These results are presented in Table 3 below.

Generally, the results indicate that in school year 1992-93, students who were members of special populations made up 32.1% of the enrollment in vocational education. Of those students who enrolled in vocational education and completed their education, 29.4% were members of special populations. This suggests that special populations students (collectively, and in each individual special population group except LEP) enrolled in vocational education at slightly higher percentages than they enroll in high school generally. Together with the information presented at the beginning of this section, it appears that special population students have access to vocational education programs that is roughly proportionate to their incidence in the general high school population.

The table also shows that the majority of special population students are those who are academically and/or economically disadvantaged, followed by those with Exceptional Educational Needs (EEN) and then those with Limited English Proficiency (LEP). Gender enrollment data shows that female student enrollment in vocational education exceeds male enrollment by more than 9%.

(Note that vocational education enrollment if defined in the *Vocational Education Enrollment Reporting System Field Manual* (1993), as any student taking one or more vocational education course which is part of a vocational program area during the fiscal year. Completers are defined as any student who completes two or more vocational education courses and then graduates. The enrollment figures represent a larger group because they include the students who take only one vocational education class, whereas the completer figures will represent a smaller group of students who took two or more classes and graduated. Discrepancies in comparing the enrollment data to completion data may occur, as these two units are defined differently, and they are not the same cohort of students.)

Table 3

Special Populations Enrollment: Wisconsin High Schools FY 1992

ENROLLMENT	TOTAL	EEN	LEP	DIS-ADVANTAGED	MALE	FEMALE
High school enrollment	95,861 (100%)	7,585 (7.9%)	668 (0.7%)	22,517 (23.5%)	N/A	N/A
Vocational education enrollment*	51,160 (100%)	4,124 (8.1%)	315 (0.6%)	13,663 (26.7%)	23,463 (45.9%)	27,697 (54.1%)
Vocational education completers#	13,524 (100%)	948 (7.0%)	65 (0.5%)	2,962 (21.9%)	6,841 (50.4%)	6,683 (50.4%)

* Enrolled in one or more vocational education course.

# Completers: Student has completed two or more secondary vocational education courses and graduated.

(Source: Wisconsin DPI (1994), *Project Application Guidelines: Carl Perkins Vocational and Applied Technology Education Act of 1990 -- P.L. 101-392, 1994-95 Guidelines, p. 88)*

Table 4 below indicates special populations enrollment in instructional program areas. There appears to be a proportionate distribution of special populations in all vocational instructional programs areas, with the exception of Health, where a higher proportion of regular students are enrolled.

Table 4

Special Populations FY 93 Vocational Education Enrollment Percentages by Instructional Program Area

INSTRUCTIONAL PROGRAM AREA	% REG	% DIS	% LEP	% DISABLED	% TOTAL
Agriculture (AG)	69%	21%	0%	9%	8%
Business (BE)	73%	22%	1%	3%	33%
Marketing (MAR)	73%	23%	0%	4%	9%
Health (H)	80%	16%	1%	3%	4%
Home Economics - Wage (WHE)	62%	27%	1%	11%	13%
Technology Education (TE)	64%	1%	3%	2%	32%
State Total - VE	69%	24%	1%	7%	100%

(Source: Wisconsin DPI VEERS Data, FY 1993)

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Enrollment by instructional program area and gender is illustrated in Table 5. This table shows the percentages of males and females enrolled in the six major vocational instructional program areas offered in Wisconsin high schools. Males and females participate in vocational education programs in roughly equal proportions to their incidence in the general school population. However, male enrollment dominates Agriculture and Technical Education program areas. Females are more prevalent in Business, Health, and Home Economics program areas. In Health, Home Economics and Technical Education, the non-traditional enrollments of males and females fall below the 25% participation rate expected for gender groups (DPI, 1994f).

Table 5

Special Populations FY 93 Vocational Education Enrollment Percentages by Area and Gender

INSTRUCTIONAL PROGRAM AREA	% MALE	% FEMALE
Agriculture (AG)	73%	27%
Business (BE)	36%	64%
Marketing (MAR)	43%	57%
Health	18%	82%
Home Economics - Wage (WHE)	21%	79%
Technology Education (TE)	86%	14%
State Total (VE)	53%	47%
State Total -- Universe	51%	49%

(Source: DPI VEERS Data, FY 1993)

Placement

The DPI emphasizes equitable participation as a benchmark for special population access and participation in Wisconsin secondary schools. DPI has established an operational definition of "equitable participation" which applies to each special population group specified under the Perkins legislation:

> *equitable participation* - proportional incidence of special populations enrolled in and successfully completing, all of the elements associated with the program under consideration (in this case vocational education). Achieving equitable participation typically requires "affirmative action," "recruitment," "related services," "assistive technology," and "other supplemental aids." The

> percentage of special populations benefitting by each element should be equal to or greater than their incidence in the total school population (Kellogg, 1994).

Equitable participation relies first on defining, and then on identifying, special populations individuals at the school and within the district and consortia. Neither defining nor identifying students with special needs is an easy task.

Once students are identified, then their needs must be identified and addressed. Placement in appropriate programs and services is the second important aspect of equitable participation, necessary for students to benefit from and succeed in school. A specific review of each special population group below includes a discussion of how students and their needs are identified. Related services and programs for each special population group to equitably participate in the full range of Wisconsin's vocational education programming are then discussed.

Individuals with Disabilities

The transition requirements of the Individuals with Disabilities Education Act (IDEA) underlies the DPI's vision for providing secondary education to students with disabilities. Students should be prepared to obtain employment, enroll in postsecondary education and have a plan to achieve independent living options upon graduation from high school. Transition planning for students with disabilities covers all three areas and is a responsibility shared by special, vocational and academic instructors, employment specialists, postsecondary educators, human services and mental health providers.

The DPI specifies students with disabilities under Wisconsin's handicapped law (Subchapter V of Chapter 115, Wis. Stats.) and the IDEA as:

> Any persons under the age of 21 years . . . with the following conditions . . . (who) may require education services to supplement or replace regular education:
>
> 1. Orthopedic impairment
> 2. Cognitive disability or other developmental disability
> 3. Hearing handicap
> 4. Visual handicap
> 5. Speech or language handicap
> 6. Emotional disturbance
> 7. Other health impairment
> 8. Learning disability
> 9. Autism
> 10. Traumatic brain injury (Kellogg, 1993, p. 2)

Students with suspected disabilities are referred by counselors, school psychologists, teachers, parents, doctors, and students at any time in the child's development. Assessment is conducted to determine eligibility for special education services; and if determined, an individual education program (IEP) is developed. The student is then placed in appropriate programs and provided individual services listed in the IEP.

In 1990, the Individuals with Disabilities Education Act was enacted by Congress. The IDEA legislation is closely linked to the principles set forth in the Perkins legislation, in that both acts seek to improve access to vocational education for students with disabilities. The Perkins legislation helps ensure that students with disabilities receive information regarding vocational education opportunities, access to the full range of vocational education programs and services available to all students, and supplementary aids and services, if necessary. Similarly, the IDEA legislation requires a multi-disciplinary and multi-agency approach to ensure that vocational assessment, employment objectives and transition services are provided for students with disabilities.

The foundation of the IDEA legislation is the requirement that all students with disabilities have an Individualized Education Program (IEP). The IEP addresses the special educational needs for students ages three through twenty-one, and transition needs to students beginning no later than the age of sixteen. The IEP ensures that students with disabilities are provided appropriate education, including vocational education programs and services. The IEP is structured to help teachers, parents, school staff and students to identify the students' abilities and needs in order to better prepare them for post high school activities such as work, education and independent living. The IDEA legislation recognizes that for many of these students, significant vocational and career components need to be addressed in the process. The IEP also helps students obtain services that are required to promote their ability to benefit from, and succeed in, vocational programming.

The IDEA ensures that an evaluation of the student's needs is discussed at IEP meetings consisting of teachers, administrators, school psychologists, personnel from community agencies (i.e. DVR), the student and parents. A vocational assessment is conducted within the context of the M-team evaluation or IEP and is used to match the student to appropriate vocational education programs and services of his/her own choice. The evaluation should cover student progress, appropriateness of program, need for modification and assistive technology or other accommodations. The assessment identifies the student's "preferences, behavior, learning style, need for assistive devices, initiative, communication needs, physical and mental endurance, medical status, transportation needs, specific work skills and specific methods of training and instruction needed" (Kellogg, 1993, p. 9). The IEP committee uses the assessment data to design appropriate services with the student.

Currently, 16,051 students with disabilities over the age of 16 in Wisconsin are required to have IEPs that address transition on file. The IDEA legislation requires every secondary student with an identified disability, who needs services and who is over the age of 16, to have transition services as part of their IEP. Although all students with disabilities are required to have an IEP on file, not all IEPs are developed consistently, with appropriate vocational instructors and administrators present. Little is known about the consistency of IEP development statewide, how IEPs affect access to vocational programming and services, how they are used internally by vocational education staff, or whether adequate follow-through and updating of IEPs is completed annually.

According to the IDEA and the Carl Perkins Act, vocational education for students with disabilities is to be provided in the "least restrictive environment." This implies that students with disabilities should be mainstreamed whenever possible into the regular vocational education classroom. The DPI supports the Designated Vocational Instruction (DVI) approach for Wisconsin high schools. The DVI is an interdisciplinary effort directed at improving the access to and quality of vocational education for students with disabilities. Special and vocational educators work in tandem to provide job entry skills in broad or specific education clusters to special education students. The DVI approach facilitates integration and participation in regular vocational education through team teaching (special and vocational instructors together), structuring support services, incorporating transition services and providing competency-based curricula. The DVI approach also stresses parent involvement and tries to address employer needs by providing students with marketable job skills.

It is not known how many high schools in Wisconsin have active DVI programs. In FY 93, approximately 50 teachers received college training on the DVI approach to special needs vocational instruction, with a similar number of staff having received this training annually since 1982. Staff at the DPI report that 635 people have received DVI training overall. In 1993, it was estimated that over 162 schools in Wisconsin use the DVI approach to assist special needs students. In addition, Carl Perkins funds are often used in Wisconsin school districts to finance DVI instructors and aides.

Many students with disabilities in Wisconsin high schools are benefitting from increased awareness among vocational educators that these students can be successfully mainstreamed in regular vocational classrooms. Vocational instructors across the state receive training and information on how to develop communication, meet individual student needs, facilitate transition for students with Exceptional Educational Needs (EEN), develop curriculum adaptations and enhance coordination with EEN instructors (Wisconsin DPI, 1994f, p. 37). However, there appears to be some inconsistency in program delivery and quality across the state because vocational education staff are not uniformly receptive to inclusion of students with disabilities in the vocational classroom (see High School Profile). More information on the access to quality services and programs designed to assist students with disabilities in the vocational classroom is needed to completely understand the impact of vocational programming for this special population group.

Academically and Economically Disadvantaged

As mentioned previously, these two population groups together comprise the majority of special population students participating in vocational education. Often, students are identified with needs that place them in both of these special needs groups. The DPI uses the following federal definitions to "identify" members of this group:

> *disadvantaged* - individuals (other than individuals with handicaps) who have economic or academic disadvantages and who require special services and assistance in order to enable such individuals to succeed in vocational education programs. Such terms include individuals who are members of economically disadvantaged families, migrants, individuals of limited English

> proficiency and individuals who are dropouts, or who are identified as potential dropouts, from secondary school.
>
> *economically disadvantaged* - individuals who are determined by the Secretary to be low-income according to the latest available data from the Department of Commerce (DPI, 1994b).

The VEERS field manual instructs schools to code students as *academically disadvantaged* if they demonstrate a need based on one of the following conditions:

1. Scores at or below the 35th percentile on a standardized achievement or aptitude test;

2. Whose secondary school grades are below 2.0 on a 4.0 scale where A = 4.0;

3. Fails to maintain minimum academic competencies.

Economically disadvantaged students must demonstrate a need based on one of the following conditions:

1. Family or student is eligible for AFDC, food stamps to be counted under Chapter 1 of Title 1 of the Elementary and Secondary Education Act, or free or reduced priced meals under the National School Lunch Program;

2. Determined to be low income according to the latest data from the Department of Commerce;

3. Identified as low income based upon other incidence of economic status granted by the Secretary of Education (DPI, 1993b, pp. 5-6).

The definition for "at-risk" students is similar to the definitions for students in the disadvantaged target groups. Wisconsin Children At Risk Stats. 118.153 defines "children at risk" as:

> Pupils in grades 5-12 who are one or more years behind their age group in the number of high school credits attained, or 2 or more years behind their age groups in basic skills levels, and are also one or more of the following:
>
> a. Dropouts
> b. Parents
> c. Adjudicated delinquents

Extensive documentation on the vocational programs and services provided to these two groups does not exist. Staff at the DPI suggest that, in part, this is because at-risk students generally receive services and participate in programs with an academic focus designed to keep them in school and acquire a diploma. Programs for parents are discussed in the single parents section below. Generally, however, it is not known to what extent these programs offer a vocational component. While several exemplary programs, such as Custer High

School in Milwaukee, offer a Career Certificate Program which encourages students to remain in school while pursuing a variety of pathways to career and further educational options, other programs like this are not well documented (Wacker, 1993). Currently, there is no mechanism in place to determine the extent of program provision, access and trends for disadvantaged students in vocational education.

Limited English Proficient

Limited English Proficient (LEP) students comprise only .6% of the students enrolled in vocational education at the secondary level in Wisconsin. The DPI includes students under the LEP code for VEERS accounting purposes if the student's:

> ". . . native language is other than English and by that reason has sufficient difficulty in speaking, reading, writing or understanding the English language as to be a barrier to the student's success in the instructional setting" (DPI, 1993b, p. 5).

The percentage of LEP students comprises only a small proportion of the total enrollment in vocational education courses. The low incidence of these individuals in the general population means that programs and services designed to meet their educational needs tend to emphasize English-as-a-Second-Language courses and related support services. Access to vocational programming is primarily encouraged through the use of interpreters, tutoring and remedial instruction (see Table 2 -- Support Services). According to DPI staff, LEP students tend to get more support in schools with significant numbers of LEP students.

Sex Equity and Single Parents

Carl Perkins-funded programs in Wisconsin reported serving a total of 1,300 single parents, displaced homemakers and single pregnant women in FY 93. These programs address the career education and training needs of teenage parents. With Perkins funds, the state offered in-services and workshops directed at curriculum development and transition for teen parents, developed a career planning curriculum guide for teen parents, hosted related roundtables and conferences, and provided staff development and technical assistance to Single Parent Coordinators (DPI, 1994f).

Many Wisconsin high schools offer additional programs for teen parents such as School-Age Parents At-Risk (SAPAR) which, although not always Perkins funded, often have career or vocational components. In the 1993 Carl Perkins Needs Assessment Survey conducted by the DPI, 330 high schools reported serving 3,671 pregnant or parenting teens, both female and male. Of those high schools, the following educational services were provided:

Regular High School	330
Alternative High School	100
Home Schooling	59
Home Bound Instruction	228
Work Site	29
Other	43

Approximately one third, or 35% of the 330 responding high schools reported offering special, separate classes for teen parents, while 65% reported that they offered no special classes. Of the 35% that offered separate classes for teen parents, many offered the following vocational topics along with parenting, birth and child development:

Budgeting	104
Career Awareness	107
Career Interest Development (Individualized)	90
Educational Requirements for Occupational Areas	64
Strategies for Economic Self-Sufficiency	103
Job Seeking Skills	93
Work-Site Learning	39
Others	35

The same schools listed the following groups as providers and agencies with which they frequently collaborated with to deliver comprehensive support services for teen parents:

•	City/County Social Service Agencies	318
•	Community-Based Organizations	192
•	CHOICES Coordinators	42
•	Wisconsin Vocational Equity (Leadership Cadre Members)	48
•	Technical College Single Parent Displaced Homemaker Coordinators	103
•	Other	81

Determining the number of sex equity participants proves to be more difficult. Generally, schools identify either:

1. Those students provided support in programs designed to eliminate sex bias or sex role stereotyping, or

2. The number of individuals who were served or worked in equity projects.

Data on students served in programs to eliminate sex bias or sex role stereotyping is inconclusive, due to definition problems and confusion which delayed reporting of final figures. According to the *1993 Wisconsin Secondary Annual Performance Report*, a total of 22,073 (of which 15,109 were students) individuals were in funded projects for sex equity. Projects which focus on non-traditional enrollment served 4,691 participants. Regional staff development/technical assistance and state-wide equity projects served 17,382. A sample of those participants responding indicates that participants served in these programs were approximately 44% male and 56% female.

In continuing efforts to improve sex equity projects, districts complete and submit to the Vocational Equity Consultant at the DPI a self-assessment and a timeline for implementing improvements. For FY 95, all districts that receive Carl Perkins funding must file a sex equity plan with DPI.

Attrition

Statewide, statistics indicate that 7,545 of the 239,283 high school students enrolled in FY 93 dropped out. The statewide average dropout rate is 3.15%. Only four metropolitan school districts reported a dropout rate above 5% (with Milwaukee School District reporting the highest rate of 14%); 15 school districts reported dropout rates between 1.3% and 4.2%. Although the DPI tries to identify students who are "at risk of dropping out," it is not known how many students are at risk of school failure statewide (Center for Education Statistics, 1994a).

In FY 93, over 43,000 students participated in vocational education programs in Wisconsin. According to the DPI's VEERS data, 430 vocational education participants (students who take one or more vocational education courses in a vocational program area) dropped out during the reporting year. This dropout rate represents 1% of students participating in vocational education in Wisconsin's high schools. Of the vocational education students who drop out, 323 (or 75%) are special population students. In FY 93, 60 disabled students, 10 LEP students and 253 disadvantaged students who were participating in vocational education left school (DPI, VEERS data, 1994). Disadvantaged students comprise the highest percentage of dropouts from vocational education programs, nearly double the number of regular students who dropout of vocational education. The high incidence of disadvantaged dropouts from vocational education programming is similar to the high incidence of disadvantaged students dropping out of high school in general.

Outcomes: Performance Measures and Standards, Graduation and Follow-up

Performance Measures and Standards

DPI developed five performance standards and measures to comply with Section 115B of the new Perkins II Act, using the Vocational Education Data System (VEDS). In response to the Perkins amendments, the current secondary vocational data system, VEERS, was established (WBVTAE, 1991). The performance measures submitted and adopted by the Committee of Practitioners in April 1992 for all Wisconsin's secondary vocational education students are listed below:

1. Students must demonstrate basic and advanced academic skills applicable to all Wisconsin State students as specified in Wisconsin State Statute S. 118.33.

2. Vocational education graduation rate equal or greater than the district's graduation rate for total student population.

3. Follow-up numbers of vocational education graduates who are employed, or engaged in further education and training which is related to their instructional program area.

4. Rate of participation of special populations will be equal to or greater than the rate of participation of the district's general population in vocational education.

5. Rate of gender participation within any vocational education program, by each gender, will exceed 25% (WBVTAE, 1991).

The 1993 Wisconsin Secondary Annual Performance Report summarizes statewide school district data for vocational education programs and services funded under the Perkins legislation. FY 93 will be the first year in which full implementation of the operational standards and measures will be in effect, with results expected in August 1994.

In FY 1992, DPI's secondary vocational education performance measures were put into place with the intention of using the initial results as a baseline to assess each school district's progress and improvement. Although data was not consistently collected from all school districts in the first year, results on several of the measures were available. In the 1992-93 school year, 302 of Wisconsin's 379 school districts with high schools participated in Carl Perkins funded activities, of which 220 reported data on performance standards and measures. All reporting districts within the state met the academic skills requirement standard, as the standard used is already part of Wisconsin state law (Wis. S. 118.33). Seventy-eight percent of high schools with vocational education programs cited a 94% graduation rate, just 1% below the standard of 95% set by DPI. Special populations were to be served at a rate equal to or greater than their incidence in the general high school population. With 62% of schools reporting on this measure, the rate of service to special populations was reported to be 2% higher than the 34% standard set by DPI. Gender equity standards were inconsistently reported and compliance with the standard was inconclusive in over half of the program areas. It must be noted that these results were based on only a partial representation of all secondary school districts with vocational education programs, as many schools did not have time to collect the data necessary for the report. Subsequent years should provide a more accurate set of reports.

The chart below shows the graduation rates of vocational education participants, broken down by special population groups. In the same school year, 21,828 vocational education participants graduated.

Handicapped	1,359	(6%)
LEP	118	(1%)
Disadvantaged	4,514	(21%)
Regular Students	15,837	(72%)

The following chart illustrates special population vocational education participation rates. Note that the rate of graduation for special populations groups in vocational education is roughly similar to their rate of participation in vocational education. In addition, when comparing the incidence of special populations groups in the total high school population (7.9% EEN, .7% LEP and 23.5% disadvantaged), special populations groups are both entering and completing Wisconsin's secondary vocational education programs at similar, although slightly lower, rates to their incidence in the total high school population. A similar comparison of male and female vocational education graduates indicates that females graduate from vocational education at comparable rates to males, although they enroll in vocational education courses at a rate that is 9% higher than male students.

Handicapped	7%
LEP	1%
Disadvantaged	24%
Regular Students	68%

The DPI also collects data on graduate intentions from all graduating seniors. In 1992-93, this data showed that 50,027 students were planning to graduate. The students responding to the survey indicated their post-graduation intentions. The data presented by the Wisconsin Center for Education Statistics (1994b), indicates the following intentions:

1. 1,182 students plan to attend a one-year vocational/technical or job training program
2. 11,411 students plan to attend a two-year or longer vocational/technical program
3. 24,134 students plan to attend a two-year or longer college or university
4. 1,792 students plan to enter miliary service
5. 6,935 are planning on entering employment or seeking employment

The report shows roughly equal numbers of males and females in all categories, with the exception of the military service category, where four times more males than females indicated plans for entering the service. The percentage of students planning to go to college is 71.1% statewide. This statistic includes the categories of two-year or longer, Vocational/Technical and College/University combined. The data does not provide specific information on special populations groups.

Table 6 describes the results of the Student Follow-up Special Needs Report by Instructional Area, conducted by the DPI Bureau of Vocational Education. Information on 80% of the 13,524 vocational education graduate completers was collected six months after graduation. Most of the information was unattainable, parents and teachers provided additional information. The table shows post-high school status of special population vocational education graduates by categories of employment, education and living status. All special population groups show the largest number of graduates either pursuing additional education, employed or in the military. There appears to be an equal tendency among all special population groups to enter education, employment and the military in fields either directly related or unrelated to their high school vocational training.

The DPI collects additional data in the follow-up survey related to wage rates, full- and part-time employment status, gender and occupational classification. However, this information is not broken down by special population groups, making it difficult to determine the quality of special population employment. Information on the type and quality of transition students are achieving is important for understanding the impact vocational programs and services have on special population students.

Table 6

Student Follow-up Special Needs Report by Instructional Area
FY 92 State Summary

CATEGORY	HANDICAPPED	LIMITED ENGLISH PROFICIENT	DIS-ADVANTAGED	REGULAR	TOTAL
Additional education (related)	169	11	436	2,596	3,212
Additional education (unrelated)	90	2	358	2,258	2,708
Employed (related)	151	1	317	727	1,196
Employed (unrelated)	145	2	433	865	1,445
Military (related)	9	0	42	89	140
Military (unrelated)	8	0	68	165	242
Homemaker	8	0	26	28	62
Unemployed	58	1	131	114	304
Not seeking employment	27	0	57	65	149
Status unknown	283	47	1,094	2,640	4,064
Deceased	0	0	0	2	2
Total for Area	948	65	2,962	9,549	13,524

(Source: DPI VEERS Data, FY 1992)

Summary

Wisconsin's secondary vocational education delivery system benefits from a comprehensive plan for the dissemination and use of federal and state funds. The state plan and corresponding guidelines direct Perkins funds to be used primarily for program improvement in new and emerging vocational education efforts such as Tech Prep, Youth Apprenticeship and School-to-Work. The DPI places a secondary emphasis on ensuring that members of special populations have access to the full range of vocational education programs, activities, and services. The DPI has chosen to interpret access broadly, encouraging schools to enhance "equitable participation" in all programs and services related to vocational education. Equitable participation requires enrollment based on provision of affirmative action and recruitment; and provision of the related services, assistive technology and supplementary services and aids required by special populations students in order to benefit from, and succeed in, vocational education. Through the planning and RFP process, the DPI has complied with all the Section 118 provisions in the Perkins law which direct recipients to ensure that special populations have access to and that special services are made available for full participation in vocational education programming. Perkins funds contribute only approximately 5% of the total secondary vocational education revenues. However, through the Perkins planning process, equitable participation by special populations students in all aspects of vocational education programming is promoted.

Additional systems of secondary vocational education accountability are in the works for the state of Wisconsin. The DPI has strengthened the state accountability system for the Perkins Act by including RFP planning reviews, equity plans, monitoring, and performance standards in the FY 94-95 guidelines. The project evaluation plans must address provision of services to special populations, a process which ensures that planned activities and participation have actually occurred in local districts. The accountability system also includes the required performance measures and standards and local program improvement plans for districts which fail to meet any of the performance standards. The DPI has responded to the need to follow-up on planned activities and use of funds by improving the evaluation and monitoring system for vocational education programs and activities funded with Perkins monies. The monitoring reports should be synthesized and analyzed at the state level to provide information for future policies and funding of special populations vocational education programming. When fully implemented, this threefold system promises to be more comprehensive than the existing process and should provide more extensive information on special populations access.

Funding for vocational programming in Wisconsin high schools is provided through a variety of resources. Revenues from federal sources such as IDEA, JTPA, and Chapter I and II, are directed to disabled and disadvantaged students. Although these funds are not specifically directed at vocational programming, they often supplement Perkins funded services and activities. Funds which assist schools to provide vocational education programs and services for special populations are limited, with most of the money coming through Perkins grants, state and local resources.

Tech Prep, Youth Apprenticeship and a number of School-to-Work initiatives, comprise most of the new vocational programming available to secondary students in Wisconsin. Of concern is the lack of knowledge available about special populations participation in these efforts. To date, special populations enrollment is not targeted by these efforts, and there is little information collected on special population participation in these programs statewide. Little is known about the types of programs and services assisting special populations participation through program and curriculum modification, accommodations, and services to ease access and encourage successful participation. While many of these efforts are still in the initial stages of development and implementation as the opportunities to enroll in these courses, programs and activities expand, special populations access must be ensured. In an effort to address this need, evaluation efforts under development promise to provide more information about programs, services, and special population participation.

Enrollment and participation trends are primarily monitored by the DPI's VEERS vocational education data system. Wisconsin is experiencing a decline in the number of vocational education courses available to students, reflecting national trends of declining enrollments in vocational education. As indicated by enrollment figures, participation rates for special population students match and slightly exceed their incidence in the general high school population. The academically and/or economically disadvantaged student comprise 26.7% of the special population students enrolled in vocational education. Disabled students account for 8.1% of enrollment, and LEP students account for .6% of vocational education enrollment. All three special population groups graduate at an equal rate. Disadvantaged students comprise the highest percentage of dropouts from vocational education programs, nearly double the number of regular students who drop out of vocational education.

Through Perkins funding, individuals with disabilities receive the greatest proportion of support services of any special population group enrolled in vocational education programming at the secondary level. These students are also assisted in vocational enrollment and related services through the IDEA and the required Individualized Education Program (IEP). The IEP assists students by identifying their individual accommodation and instructional needs and informing students of vocational options. The IEP also charts a plan for the student's transition to work, further education and independent living. In many high schools, the IDEA, the Carl Perkins Act, and the Americans with Disabilities Act (ADA) work together with Wisconsin's DVI approach to vocational education delivery for special needs students. Schools also receive assistance from the DVR. Collectively, the legislation and related agencies provide a foundation for the most comprehensive system for special population's participation and transition in vocational programming in Wisconsin. However, there is currently no capacity to determine consistency in program delivery trends for vocational education programs and services to students with disabilities.

Academically and economically disadvantaged youth in Wisconsin comprise the largest percentage of special populations in vocational education courses, but appear to be receiving fewer services than other special population groups to assist them in succeeding in those programs. Dropout data on vocational education participants indicate that disadvantaged students have the highest incidence of dropping out. There is little information available on the provision or impact of vocational programs and services regarding this population group. In short, we know these students are enrolled, but we do not know what happens to them after that.

The percentage of students with Limited English Proficiency (LEP) is small compared to the total enrollment of vocational education courses. The low incidence of this group in the general population means that programs and services designed to meet their education needs tend to emphasize English-as-a-Second-Language (ESL) courses and related support services. Access to vocational programming is primarily encouraged through the use of interpreters, tutoring and remedial instruction. LEP students tend to get more support in schools with significant numbers of LEP students. Little seems to be done by way of transition services for these students; there are few specific services that help these students bridge successfully to the world of work or higher education.

Single parent programs are generally available in Wisconsin's high schools, but only 35% offer specialized classes and services targeted to serve teen parents. The vocational content of these programs is not generally known, nor is it known how these programs work with existing vocational programs, courses, activities and services within the schools. Sex equity projects appear to have been widely attended by over 15,000 students in FY 93. Non-traditional enrollment projects targeted 4,600 students.

Wisconsin's Performance Measures and Standards for FY 92 provide baseline data for assessing basic outcomes for Wisconsin high schools' vocational education programming. These measures provide state level outcomes for academic skills attainment, graduation rates, follow-up on employment and further education, and participation rates of special populations and gender groups. The FY 93 data is still being reviewed by DPI and was not available for use in this study. The graduation information obtained from the VEERS data indicated that the rate of graduation for special populations groups participating in vocational education is roughly proportional to their rate of participation in vocational education.

Follow-up surveys conducted by the DPI describe general post-graduate employment and educational status of vocational education students. The information shows that there appears to be an equal tendency among all special population groups to enter education, employment and the military in fields either directly related or unrelated to their high school training. Information on the type and quality of transition students are achieving is limited, with little information on special population wage rates, duration of employment, or independent living status documented.

POSTSECONDARY VOCATIONAL EDUCATION PROGRAMS IN WISCONSIN

In this section, the postsecondary educational opportunities for special populations students will be reviewed. The information presented is based on the most current data available through reports, documents and interviews with WTCSBB staff. The overview begins with a review of the Wisconsin Technical College System Board's program administration, funding sources, policies, monitoring and evaluation practices which impact access for members of special populations. In the second section, support services and programs designed to meet the needs of special population students are reviewed with an emphasis on access and participation. This section describes the technical colleges' role in new and emerging vocational programs such as Tech Prep and youth apprenticeship, support services, guidance and counseling, articulation with secondary schools, and transition services for all special population groups. The third section of the overview provides information on state-level patterns of access, discussing general trends in recruitment, enrollment and participation. Then, each special populations group is examined individually, including identification, specific programs and services, and exemplary programs. The last two sections cover attrition, graduation, placement and follow-up, and finally performance measures and standards outcomes. In conclusion, the postsecondary overview findings are summarized and unmet needs are discussed.

The primary source of the data in this section of the report was obtained from the WTCSB statewide data system titled "Client Reporting System". The Client Reporting System collects numbers and demographics of clients who participate in State Board administered/funded grants and who enroll in WTCSB courses. The 1993-94 year was the first year Wisconsin Technical Colleges reported under the statewide data collection system. The accuracy of the data reported is being improved through in-service and training.

The postsecondary technical college system differs in significant ways from Wisconsin's secondary vocational education delivery system. First, the postsecondary system offers a wide array of occupational, technical and adult education courses and degree programs which all fall under the "vocational education" umbrella. All courses, programs and degrees provide occupational, career or vocational training and skills development. Therefore, when reviewing access to the full range of vocational programming available at Wisconsin's technical colleges, essentially **all** the programming must be reviewed.

Second, while the majority of postsecondary technical college students are adults who have made a choice to acquire additional education, access to higher education is not automatic. Individuals must first meet entrance requirements, pay tuition fees and decide on courses, and occupational or degree programs to pursue. These are up-front considerations for any individual considering attending a technical college in Wisconsin, but often pose unique challenges for special populations students.

Third, one purpose of the postsecondary college is to provide students with the opportunity to pursue a technical college degree with the intent to gain employment in a chosen career upon graduation. Postsecondary college students are essentially customers of the college -- customers who have unique demands and specific educational expectations. Program and institutional effectiveness in their eyes rests not only upon successful program completion and graduation, but also upon postgraduate employment. Special populations students often require additional assistance to succeed in programs and acquire the skills necessary for employment. Therefore, it is important for the technical college districts to address the full range of access issues, from recruitment, enrollment and participation to graduation and employment. The discussion of access issues for special populations students in this section will attempt to address these and other institutional differences between secondary and postsecondary delivery systems.

PROGRAM ADMINISTRATION AND FINANCIAL SUPPORT

Program Administration

The WTCSB has taken a focused approach to allocating its share of Perkins funds to the state's technical college districts. The revised Perkins legislation allows funds to be spent for a broad set of purposes, including specific program improvement and ensuring access for special populations groups, within these parameters, the WTCSB has chosen to focus funding on improving support services and counseling for special populations groups. The philosophy which underpins this policy is one that recognizes the initial hurdles many special populations students face in preparing for, enrolling in, financing, and participating in a postsecondary program. The WTCSB prioritizes funding of services which assist members of special population groups to enter into, and then to remain and succeed in, programs at the technical colleges in Wisconsin.

In the VEA Guidelines the WTCSB, in compliance with the Perkins legislation, requires that:

> "...fundable projects must be of sufficient size, scope and quality to effectively meet the vocational education needs of students involved in funded activities and encourages joint planning with the Job Training Partnership Act, the Wagner-Peyser Act, the Education of the Handicapped Act, the Rehabilitation Act of 1973, and other eligible recipients in order to ensure non-duplication of effort and promote cooperative programming with other institutions and organizations." (WBVTAE, 1993c, p. 10)

Such coordination between providers and funding grants allows the technical college system to offer more comprehensive support and assistance to its diverse adult student population. As will be reviewed in later sections, joint financing and service delivery are common aspects of non-traditional programs, basic skills programming and special services to students with disabilities. The technical college districts work in concert with local PICs, DVR, county social services, community groups and others to provide services for special populations individuals.

Financial Support

Perkins basic grant funds available for 1994-95 are shown in Table 7 below. All sixteen of the technical college districts receive Perkins funding. The Title IIC (Postsecondary and Adult Vocational Education Programs Formula Funds) amounts to $7,819,956 or 75% of the funds available to the Board. The postsecondary formula is based on the percentage of Pell and BIA (Bureau of Indian Affairs) grant recipients in a district (WBVTAE, 1991). The formula-based funding distribution serves to target special populations within each district and replaces the old system of "set-asides" which were dispersed by the state through the competitive RFP process. The reauthorized Perkins Act eliminated the dollar-for-dollar, in-kind local match previously required. The WTCSB reasoned that the quality and level of services provided in Wisconsin would be maintained if local areas continued the same level of funding support for Title II Basic Grant programs. This "maintenance of effort" was ensured by requiring districts to make a local contribution based on the previous year's actual expenditures. In *The 1991-1994 Three Year Plan for the Use of Federal Funds* (WBVTAE, 1991), the board stipulated that Title II formula funds will be used in Wisconsin to provide:

1. Special services for members of special populations; and then and only then,

2. Activities for all students designed to improve programs, services, and activities.

Table 7

Fiscal Year 1994 Perkins IIC Planning Amounts for Wisconsin Technical College Districts

	# of Pell and BIA recipients	Planned Title IIC Allocation	Guidance and Counseling Requirement	Maintenance of Effort Amount
TOTAL	21,671	$7,819,956	$1,573,486	$6,952,427

(Source: WTCSB (1994). *Carl D. Perkins Vocational and Applied Technology Education Act Postsecondary and Adult Programs Planning Amounts.*)

Additional funding sources used to provide services and accommodations for special populations include monies obtained through state General Purpose Revenue (GPR) and DVR revenues. In 1993, GPR grants provided eight districts $25,000 each to pay for Transition Specialists. DVR awarded twelve districts Third Party Contracts totaling $1.4 million to provide interpreters, learning specialists, HIP/VIP staff (at the centers for the visual and hearing impaired), specialized training programs and tutors. The Technology Loan Center provides adaptive equipment to the technical colleges. It is jointly funded by the districts and DVR with $150,000 and governed by a steering committee with representatives from MATC-Milwaukee, North Central Technical College, DVR and the other technical college districts (Heffron, 1994).

Evaluation and Monitoring

The WTCSB and WTC districts operate an evaluation process which monitors over 1,000 approved programs every year. There are three stages of evaluation ranging from general monitoring in Phase I, to in-depth evaluation in Phase III. In a Phase I evaluation, occupational programs are monitored for operational factors such as enrollment, retention, and placement status of program graduates (WBVTAE, 1993a). In this phase, each district self-monitors their own programs and the WTCSB reviews the monitoring activity. The WTCSB requires each district to submit data for the Client Demographic Record and the Performance Measures and Standards. This information is processed through the WTCSB client reporting system and provides nominal information on program participation. These reports are reviewed by program managers and recommendations are made for Phase II screening.

All Perkins funded projects are required to submit mid-year reports on funded activities, and a Grant Evaluation Report. WTCSB requires districts to submit the following reports on project operation: a separate Client Grant Activity Demographic Record, Grant Evaluation Report, and a Grant Activity Monitoring Report. These projects are monitored through Phase III processes.

More comprehensive, in-depth, evaluations of existing occupational programs are conducted on a five year rotating basis in Phase II evaluations. In addition, many projects are selected by districts to be reviewed based on the five year plan. Phase II evaluations review eight areas of individual vocational-technical programs:

1. Student demographics, recruitment, retention, graduation and placement
2. Curriculum content and delivery
3. Qualifications, certification, and continuing professional development of instructors
4. Counseling and support services such as job placement and financial aids
5. Student organizations
6. Impact of advisory committee
7. Facilities, equipment and resources
8. Equity and access (WBVTAE, 1993a)

These evaluations are conducted by the districts, and are generally comprehensive, however, a district may choose to focus on only one or more of the key program factors for review. Phase III requires districts to respond to the recommendations which evolve from the first two phases with reports to the WTCSB and development of an action plan for program improvement. The WTCSB annually produces a summary of selected program evaluations and service evaluations.

Detailed information about programs and services at the postsecondary level remains available primarily at individual technical college districts. The Phase II and III evaluations are not conducted for all programs annually, and information is shared for program development purposes but is not regularly shared across districts. While evaluation and monitoring reports are reviewed to inform districts of program improvement needs, there is no extensive analysis of monitoring reports for statewide special population participation and program trends. This information could be used to assist other districts in improving service delivery and program practices; it could also be used to document state level patterns of program effectiveness in serving special populations groups. Currently, the WTCSB does not have the capacity to analyze this information to its full potential, because the data systems and personnel to conduct an extensive analysis are not in place. Staff at the WTCSB relate that efforts are underway to cross reference services with program outcomes, which would provide some initial state level information relating program practices to student outcomes including outcomes for special populations students.

On-site team visits by the WTCSB staff are conducted at each technical college district. By the end of 1994, 11 of the 16 districts will have been monitored, with the remaining 5 to be completed next year. On these site visits, WTCSB staff reviewed compliance with Perkins Act provisions and assurances, and provided technical assistance for districts to improve future plans and services. The staff at WTCSB report that these extended site visits to technical colleges are the most productive form of monitoring special population services and projects, both for the individual technical college and the WTCSB.

The WTCSB does have some new systems for assessing and evaluating program effectiveness under development. A new process for reporting on program quality and standards will be implemented for basic skills education programs in 1995. These indicators will review program quality components such as learner progress towards acquiring basic skills and competencies; learner advancement to instructional program or individuals goals; retention; program planning which is ongoing and participatory; program curricula and instruction designed to meet diverse student needs; staff development; identification of student support service needs; and recruitment and coordination with community agencies (WTCSB, 1994a).

An Institutional Effectiveness Model is also under development with the hope that core indicators of student achievement and institutional performance will provide additional information for accountability. The system would follow a cohort of students through needs and interest identification, assessment, course completion, grades, retention and withdrawal, graduation and skills attainment, licensing and job placement. It would also look at employer satisfaction, achievement of institutional goals and public perceptions and satisfaction of institutional effectiveness. This system promises longitudinal information that would provide details about a cohort of students beyond enrollment and graduation data which could inform us about program process and long-term outcomes related to those processes. The WTCSB Evaluation unit is working on integrating this model with the Perkins performance measures and the state program evaluation (WTCSB, 1994e).

The Perkins Act required states to develop performance standards and measures for use in evaluating Perkins supported activities. The WTCSB extended the application of these standards and measures to the evaluation of all approved programs. The standards and measures were first applied to the 1992-93 programs and Perkins activities. Starting in 1993-94, the districts are required to develop program improvement plans to improve those programs and services that failed to meet one or more of the standards. If subsequent evaluations show that a district has not improved its performance, the WTCSB is required to assist the district in revising its program improvement plan.

Evaluation and monitoring practices at the state level do not as yet provide adequate information regarding special populations access to the full range of vocational programming and services available to postsecondary students. The WTCSB has begun to implement more substantive evaluation practices for programs, services, students and institutional effectiveness, which should fill in the gap between enrollment figures and graduation rates.

SPECIAL POPULATIONS SERVICES AND PROGRAMS

Occupational Programs/Courses

The WTC Districts offer an array of programs in over 300 occupational areas. All colleges offer two-year technical programs leading to an associate degree. One- and two-year vocational diploma programs, college parallel programs, advanced technical certificates, apprenticeship training and adult basic education courses are also offered at most of the technical college campuses. Three of the 16 districts offer a college parallel program. Over 400 different associate degree or vocational diploma programs are offered in eight different instructional areas: agribusiness, business education, marketing education, graphic and applied arts, home economics, industrial, health services and technical.

Table 8 on the following page includes special populations enrollment counts in occupational program areas (U.S. Department of Education program areas are not used in this report). The count includes all students enrolled in vocational technical education courses, Associate Degree, one- and two-year diploma, Short-term Certificate, Apprentice-Related Instruction programs, and Adult courses. It does not include any students solely enrolled in Adult Basic Education, GOAL or college parallel courses. Special populations students are enrolled in all occupational areas. Disadvantaged students are the largest special populations group, concentrating in the Business, Health and Technical program areas. There are just over 3,500 LEP students enrolled primarily in the Business, Technical, and Consumer and Homemaking Education program areas. Students with disabilities are concentrated in Business, Technical, Trade and Industry and Health program areas. Over half of the single parent, displaced homemaker and single pregnant women are enrolled in the Business and Health occupational areas. Agriculture and Occupational Home Economics program areas have the lowest enrollment figures and the lowest incidence of special populations students. Longitudinal analysis of enrollment in program areas by special populations students is not currently conducted. Longitudinal information on special populations students in particular program areas would allow assessment of enrollment opportunities and placement patterns which begin in high school and carry over into postsecondary institutions and employment.

TABLE 8: POSTSECONDARY ENROLLMENT, WISCONSIN TECHNICAL COLLEGE DISTRICTS, 1992-93

	UNDUPLICATED ONLY			UNDUPLICATED AND DUPLICATED							
Occ. Program Area	Total Enrollment	TOTAL		Regular Voc. Tech. Ed	Disadv.	LEP	Disabled	Corr.	SP/DH/ SPW	Sex Equity (non-trad.)	Adult
		Male	Female								
Agriculture	8,442	5,149	2,756	4,311	931	40	172	1	195	450	3,374
Marketing	36,294	17,977	17,229	3,989	3,444	289	655	7	1,317	65	30,410
Technical	68,165	49,486	14,865	7,460	7,068	729	1,280	21	1,877	1,177	57,011
Consumer/ H - Making Ed.	20,551	3,878	16,142	--	2,125	714	475	6	926	--	20,551
Occ. Home Ec.	30,861	7,728	22,062	965	2,561	273	631	8	1,214	59	29,255
Trade & Industry	48,719	41,520	5,125	3,561	4,247	511	977	32	1,249	266	42,576
Health	47,492	15,548	29,931	7,025	7,247	543	945	10	2,803	991	37,189
Business	74,005	18,523	53,431	7,732	12,075	1,237	2,085	28	4,731	883	61,047
Tech. Ind. Arts											
GRAND TOTAL	309,200	146,619	150,066	32,812	35,778	3,568	6,461	107	12,877	3,631	259,329

(Source: WTCSB, 1993, Client Reporting Data)

Remedial and ESL Courses

Special populations program applicants are to have their interests, abilities, and special needs assessed in relation to successful completion of their programs. Since there is no equivalent requirement for the IDEA's IEP for postsecondary students, counselors assist many special populations individuals in developing individualized assistance plans, which outline career plans and guide students to available remedial resources such as brush-up courses, high school completion, study skills support, learning labs, tutoring, and other assistance. How many students have individualized assistance or instructional plans is not documented by the WTCSB.

Adult Basic Education (ABE) and Goal Oriented Learning (GOAL) programs offer students a chance to gain the skills and competencies necessary to enter a degree program and/or enter employment. If students lack a high school diploma, they have the opportunity to complete the requirements for their high school diploma, a High School Equivalency Diploma, or prepare for the General Educational Development (GED) test.

Job Training Partnership Act (JTPA) clients are often slotted into local technical college activities, classes and programs. Many of these JTPA clients receive remedial education and vocational/technical training. Although the exact amount of JTPA funds and the number of JTPA funded students that participate in Wisconsin's vocational education system is not available, there is some tracking done on the referrals. In a 1991 report, the WTCSB estimated that over 2,000 JTPA participants had enrolled in classes for associate or vocational degree programs. Over 16,000 individual JTPA referrals were enrolled in classes of a short term nature, such as GOAL (a remedial basic skills program), a welfare-to-work program, or adult education. Staff at the WTCSB feel that these estimates fall short of the true number of JTPA clients served by the technical colleges, as the reporting format requires entering students only to note one referral reference. Often, a JTPA client is eligible for a number of services, and not all are noted on the referral form (Chlebowski, 1991).

New and Emerging Vocational Programs

The WTCSB works together with the DPI to administer cooperatively the state's Tech Prep initiative, largely funded through the Carl D. Perkins legislation. Staff from the WTCSB work on developing Tech Prep curriculum; providing technical assistance, inservice training to instructors, counselors and consortia members; establishing advanced standing and articulation agreements between high schools and the technical colleges; and developing performance measures for monitoring purposes.

Tech Prep is part of the larger School-to-Work Transition Initiative in the state of Wisconsin. Tech Prep is an effort directed to enable **all students** to transition to postsecondary education or work. Equal access for special population students, including students with disabilities, is one of seven evaluation elements identified in the Perkins legislation regarding Tech Prep. Wisconsin's statewide enrollment figures of special populations students participating in Tech Prep activities are not currently known. Efforts to consider special populations students' needs in the development of Tech Prep, and similar efforts to include special populations students in school level Tech Prep initiatives are evident within the state, although not widespread. For example, Lakeshore Tech Prep consortium has established a Tech Prep committee of the local Tech Prep

Council, with ESL instructors, at-risk and minority specialists, DVR and special needs coordinators representing special populations interests and access to Tech Prep (Wacker, 1993). These resource people work as advocates for the inclusion of special populations members in Tech Prep activities and classes. However, the extent of inclusion and access of special populations students in all 16 Tech Prep consortia is not known. For additional information on Wisconsin's Tech Prep initiative, refer to the secondary section on Tech Prep presented earlier in this report.

Support Services

In FY 93, a total of 42,059 students were served in the Wisconsin Technical College system through Perkins funded activities. At the postsecondary level, WTCSB prioritizes special services for members of special populations. The prioritization of services for special populations ensures that Perkins funding and services are maintained for special populations students. Funds must first be used to provide the following fundable activities for members of special populations before such activities may be supported for all students.

Special Services

- Guidance and Counseling
- Supplementary Services including Adaptation of Equipment
- Remedial Instruction
- Upgrading of Curriculum
- Inservice Training
- Apprenticeship Programs
- Tech-Prep Education
- Special Services Coordinator
- Equipment
- Adult Training Programs
- Economic Development
- Mentor Programs
- Private Sector Provision (WBVTAE,1993c)

Table 9 below registers a total of 224,280 services delivered in FY 93. The duplicated count results from multiple services provided to students, with the average student receiving six services. As all services listed in the table are Perkins funded, and as counseling services are prioritized by the WTCSB for Perkins activities, these services are targeted to serve special populations students first. The table lists services in order of those most frequently provided. Note that information and referral services were provided most often. This category includes case management and providing information about, or referral to, other programs and services available. Information and access assistance is followed by special assessment and evaluation and counseling services. These services assist students in identifying any particular academic or service needs they require to successfully complete their program at the technical college. These services are essentially "front end" services which assist students to enroll in programs and services to meet their needs.

Table 9

Services Provided by Grant Activity Under the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (for 1992-93)

SERVICES PROVIDED	COUNT*	PERCENT*
Information/Referral	43,892	116 %
Special Assessment/Evaluation	36,070	95 %
Personal/Group Counseling	29,578	78 %
Remedial	12,678	33 %
Tutorial	8,040	21 %
Financial Assistance	7,876	21 %
Consumer/Homemaking	7,474	20 %
Transition Services	6,502	17 %
Career Awareness/Exploration	5,656	15 %
Occupational Training	5,660	15 %
Other	21,242	56 %
TOTAL SERVICES DELIVERED	224,280	
TOTAL CLIENTS SERVED	42,059#	

* Duplicated Count
# Unduplicated count

(Source: WTCSB, 1994. *1992-93 Annual Performance Report for the Carl D. Perkins Vocational and Applied Technology Act of 1990*).

Services in the "Other" category provided less frequently are detailed below:

Service Provided	Count
Job Placement	3,592
Basic Skills	3,334
Pre-Vocational Training	3,182
GED/HSED	2,118
Alternative Test Taking	1,878
Note taking/Test taking	1,858
Adaptive Course Material	1,216
Adaptive Equipment Instructional Aids	998
Adult High School	922
Interpreter Services	844
ESL	698
Institutionalized Services	456
Family Literacy	100
Workplace	46

(Source: WTCSB, 1994a)

These services tend to be more specialized, aimed at individual students' needs, and therefore are not required by all students entering postsecondary education. These services help special populations students gain skills and competencies necessary to succeed with post secondary course work and fully participate in degree and certificate programs. Existing reporting formats do not provide information on service delivery to specific special population groups. A more informative approach would be to disaggregate this information by program and population group. More detailed information on the quality and intensity of services for special population students is necessary to draw any conclusions about service effects and success for these students.

Not all services available to special populations students are included in the list presented above. Two centers for the hearing and visually impaired, located in Milwaukee and Wausau, provide rehabilitation, pre-vocational independent living and vocational programs assistance for students with sensory disabilities. All sixteen colleges are equipped with TDD numbers for the deaf and hearing impaired. Support and guidance are provided within the colleges by instructors and counselors who assist students in registration, career planning, referrals, and personal assistance. The technical colleges also have an extensive referral system with state social service agencies, DVR, local PICs, secondary schools and community agencies which assist students with special needs. Many technical colleges also have vocational assessment centers, study skills centers, library/learning resource centers, student activity and support groups and child care services available for student use.

Many of the services open to the students are noncompulsory; in other words, participation and use of the service is voluntary. Once the college has informed the student of available options and services, it is up to the student to seek out and use the facilities and accommodations offered. Discussions with technical college personnel indicate that many special populations students choose not to follow through on options open to them, or fail to continue through with assistance until graduation. Lack of student self-advocacy is a barrier to special population students success at the postsecondary level.

Financial Assistance

As mentioned in the introduction, one of the first issues postsecondary students must address is cost. The WTC districts offer various ways to finance the costs of attending technical college. All sixteen technical colleges offer scholarships, loans, grants, and work-study information through their financial aid offices. Additional resources are available for some special populations students from other agencies. For example, DVR provides assistance for some students with disabilities, and JTPA programs provide funding for single parents and low-income women enrolled in non-traditional workshops and programs. Program fees are exempted for students enrolled in ABE, GOAL, ESL and adult high school. Federal assistance in the form of Pell Grants and BIA grants is available for low income and Native American students. Talent Incentive Program (TIP) state grants are available for culturally and economically disadvantaged students.

Information about financial aid opportunities is provided through recruitment material and technical college financial aid offices, and is distributed to high school guidance counselors. In order to ease the financial aid application process for students, only one financial aid form must be filed, and it is good for all programs and at all 16 technical college districts.

Guidance and Counseling

As noted above, guidance and counseling services are a prioritized service offered by all 16 technical college districts. The emphasis on counseling services emanates from the Board's prioritization of counseling, assessment and referral services as an entry requirement for all special populations program students. In recognition of the important role this service provides to facilitate entry and later success for special populations students, the WTCSB has effectively ensured that a large proportion of Perkins funds will be used to support counseling services for special populations students.

The *1992-93 Annual Performance Report for the Carl D. Perkins Vocational and Applied Technology Act of 1990* (1993) relates that 58 counseling projects were funded through Perkins grants in 1992-93.

19	designed to provide services to disabled participants
22	designed to provide services to disadvantaged participants
7	designed to provide services to LEP participants

In addition, Perkins dollars were used by three technical colleges to hire assessment personnel.

Assessment of students is conducted by guidance and counseling staff prior to program enrollment at the technical colleges. Depending on the district, several different assessment instruments are used, including ASSET, ACT, SAT, TABE, and a variety of occupationally specific reading tests. The WTCSB encourages counselors to supplement the assessment process through informal input from high schools, portfolios, parents and agencies such as DVR. This additional input helps counselors identify student needs and direct students to appropriate programs and services. This year and next, the WTCSB is requiring districts to include in their proposals detailed descriptions of comprehensive assessment processes which must assess student interests, abilities and special needs in order to comply with the Perkins regulations.

Articulation and Coordination

The services and accommodations provided to special populations students by the WTC districts are offered through a combination of federal and state programs and coordination with other state agencies which serve students with special needs. The Rehabilitation Act of 1973, the Americans with Disabilities Act, the Job Training Partnership Act, and state GPR and DVR funds collectively serve individuals with special needs, enabling them to gain access to postsecondary education. The technical college personnel work closely with a variety of community agencies and families to provide case management and coordination of post-training services and placement for special populations students.

Articulation with secondary schools establishes a bridge between high school and further education. Tech Prep and youth apprenticeship programs have articulation components built in, encouraging students to take applied and integrated sequences of courses that lead to postsecondary course work. Curriculum alignment between the sixteen technical colleges programs and secondary vocational education courses is fairly consistent across the state (Ellibee & Phelps, 1993). This linkage promotes articulation and access by providing a continuity in curriculum, education and career options for students. Through Tech Prep and related efforts on the part of the WTCSB and the DPI, Wisconsin has an increasing number of articulation agreements which offer dual credit and advanced standing options to high school students who take advanced courses while still in high school. It is not known how many special population students take advantage of advanced standing or dual credit options.

Transition Services

Each of the sixteen technical colleges has a Special Populations Coordinator and staff assigned to work with special populations students. In an effort to build a smooth transition for special populations students entering the technical colleges, a variety of services are offered.

For example, transition coordinators for students with disabilities are involved with recruitment, individual program planning, career development and enrollment. The coordinator works with the student, families, DVR, service providers and employers. The coordinators assist disabled students in gaining access to counseling, support services, and financial aid. Upon completion of the student's postsecondary education, the coordinator assists him/her with job seeking skills, job placement, and support services through DVR (Heffron, 1994).

Many high schools and technical colleges sponsor career day fairs where technical college educational options are presented to students. Special needs students and their parents can attend open houses at area technical colleges, where service providers, state agency coordinators and college staff are on hand to answer questions about needed services and options for postsecondary education. Some districts have articulation projects, designed to introduce special populations students to technical college options in their senior year. All technical colleges offer summer orientation designed for students with special needs, in order to ease these students into a new environment.

The percentage of students who enroll in technical college the semester after their graduation from high school is between 5 and 15.5% statewide (Wisconsin DPI & WTCSB, 1994). Most students who enter technical college do so after a period of time spent either seeking employment or working. The direct transition rate between high school and technical college is targeted to increase through Tech Prep and other school-to-work efforts. The direct transition rate for special populations students is not known.

In the fall of 1993, the Wisconsin DVR and DPI received a joint five-year grant from the U.S. Department of Education under the Individuals with Disabilities Education Act (IDEA). The "State Systems for Transition Services for Youth with Disabilities" will provide $466,641 for demonstration projects in the first year, with a total of $2.5 million to be committed over the five year period. The aim of the grant is to organize comprehensive transition services through local partnerships between schools, families, county human services departments, technical colleges, Job Service, Private Industry Councils, higher education institutions, business and other local service providers. The grant is designed to improve the transition outcomes for over 3,000 students with disabilities statewide by increasing:

- Access and applications to postsecondary education options
- Postsecondary integrated employment rates and supported employments
- Independent living placements
- Access to community services (Bougie, 1994)

The transition services will help students with disabilities "...move from high school to employment, postsecondary studies, and independent living situations," said State Superintendent John Benson (Bougie, 1994).

A majority of transition efforts are targeted to students with disabilities. The services available for disadvantaged and LEP students do not appear to be proportionate. In part, this may be because postsecondary students are adults, and therefore are responsible for self-identifying their status and needs and seeking out services independently. This is why the WTCSB has placed an emphasis on counseling and referral services to assist students up-front with information on services designed to help them succeed in their educational efforts. High schools are working on establishing coherent transition services for students with disabilities. A more consistent effort to build transition planning into all high school students' career plans would help more disadvantaged and LEP students make a successful transition to technical college.

PATTERNS OF ACCESS:

Recruitment, Enrollment and Placement

Recruitment

Literature distributed by the WTCSB and its affiliated technical colleges details services available to diverse students. The technical college's bulletins and promotional materials include information on academic assistance, supplementary services, remedial help, and financial aid. Each technical college publishes a college course catalog which includes information on special programs, services and personnel which assist special populations students' access to college programming. For example, the Gateway Technical College bulletin lists TDD numbers for the deaf and hearing impaired; an equal opportunity statement in English and Spanish; and phone numbers for students inquiring about special accommodations in both English and in Braille -- all clearly presented on the back cover. In addition, technical college staff host a variety of information, career days and workshops for students interested in attending technical college after high school.

Many of the technical colleges have open admissions for students applying for the upcoming semester courses and programs. Applications from high school students are accepted as early as their junior year in high school. Entry is based on a first come first served basis for most programs in each of the technical college districts. Programs which have exceeded capacity enrollment establish formal waiting lists from which students are enrolled by order of application dates (WTCSB, 1994g).

Enrollment

A breakdown of patterns of enrollment of postsecondary special populations students is provided in Table 10. The Student Characteristics by Program Aid Code table shows the wide range of programs and courses taken by special populations students in 1992-1993. The majority of special populations students are enrolled in vocational courses and programs which lead to a degree program or certificate of completion. Note that a large number of Academically and Economically Disadvantaged students are participating in Adult Basic Education (ABE) programs and courses. Staff at the WTCSB report that there are an increasing number of students coming to the technical colleges in need of remedial and basic skills education. This has placed an increased demand on the courses and programs designed to assist students with gaining the credentials necessary to enter degree programs. ABE and GOAL programs are designed to provide this kind of training. There is also an increased demand for tutoring services at most of the technical colleges. The increased need for remediation effectively delays entry to quality programs and degree programs offered at the technical college. There is a need to review, in-depth, how this phenomenon affects special populations student's ability to gain access to quality vocational education at the technical college level. The review should encompass secondary school activity as well as postsecondary participation in order to fully capture the transition needs of these students.

Table 10

Head Count Enrollment Total Disadvantaged and Disabled Students for Period 1992-1993
Wisconsin Technical College Districts

Academically Disadvantaged	Economically Disadvantaged	Total Disabled	Total Count
61,778	44,842	12,082	452,987

(Source: WTCSB, 1993, Client Reporting Data)

Individuals with Disabilities

In the *VEA guidelines 1994-95*, the WTCSB sets out the following definition for Handicapped:

> *Handicapped* means any individuals with any disability as defined in section 3(2) of the Americans with Disabilities Act of 1990; disability categories include mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired persons, or persons with specific learning disabilities.

In FY 93, the technical college system enrolled over 12,000 students with disabilities in a full range of courses and programs. Of these, 2,840 are self-identified persons with disabilities. All other students with disabilities are identified upon entry in the admission process. The Client Reporting System identifies students with disabilities that are served in handicapped projects by their primary disability. Students with disabilities served by the technical college system have the following range of identified disability characteristics:

Disability Characteristic	Percent Served
Specific Learning disability	36%
Speech or Language Impaired	1%
Deaf and Deaf Blind	2%
Hard of Hearing	5%
Seriously Emotionally Disturbed	5%
Mentally Retarded	6%
Visually Impaired	6%
Multi-Handicapped	7%
Other Health Impaired	16%
Orthopedically Impaired	16%
	100%

Projects funded under Perkins legislation grants served 5,985 students with disabilities. The WTCSB uses Perkins funds to provide support services which enable students with disabilities to participate in regular (mainstream) occupational training programs. The services vary across technical colleges due to staff availability and identified needs of the students. The support services concentrate on assessment, career and academic counseling, referral to other services, and special placement services. The technical colleges employ special services coordinators to work with instructors on curriculum modification and techniques and methods to promote full inclusion for special needs individuals (WTCSB, 1994a). A variety of special needs staff, transition coordinators, counselors and instructors are available at the technical colleges to assist students with special needs before, during and after program participation.

Special occupational training programs are designed especially for students with disabilities. Perkins money is used to provide support staff for these programs. These programs are offered at two districts only, and are jointly funded by DVR. Perkins funds are used to provide support services for students participating in these programs. Programs include: Office Aide, Nursing Assistant, Custodial Services, Business Open Lab, Food Service Assistant and Multi-occupational Careers programs. The programs provide specialized curriculum, applied learning opportunities, connections with DVR and placement services.

Economically and Academically Disadvantaged

For the purposes of Carl Perkins funding applications and accounting, the WTCSB uses the following definition to identify disadvantaged individuals in the postsecondary vocational education system:

> *Disadvantaged* means individuals (other than handicapped individuals) who have economic or educational disadvantages and who require special services and assistance in order to enable them to succeed in vocational education programs. The term includes individuals who are members of economically disadvantaged families, migrants, individuals who have limited english proficiency and individuals who are dropouts from secondary school. For the purpose of this definition, an individual who scores below the 25th percentile on a standardized achievement or aptitude test, whose secondary school grades are below 2.0 on a 4.0 scale, or who fails to attain minimal academic competencies may be considered "educationally disadvantaged." The definition does not include individuals with learning disabilities (WBVTAE, 1993c).
>
> *Economically disadvantaged family or individual* means such families or individuals who are determined by the Secretary to be low-income according to the latest available data form the Department of Commerce (WBVTAE, 1993c).

Wisconsin's sixteen technical colleges served in over 452,900 students in FY 93. Over 61,000 academically disadvantaged and over 44,000 were economically disadvantaged (WTCSB, 1993 Client Reporting Data). On an unduplicated basis, 85,660 students had one or more disadvantagements including individuals with limited English proficiency. These individuals comprise just over 18.5% of the total student body. These individuals enroll most frequently in Adult Basic Education and Associate degree programs. As was noted earlier, the number of disadvantaged students attending technical colleges is growing, increasing the demand for remedial and support services. Perkins funds provided support services to 28,198 disadvantaged students in 1992-93. These services included efforts to recruit disadvantaged students into vocational programs; tutorial services; remedial instruction; counseling and referral (often to coordinating agencies and social service providers); and career guidance and counseling (WTCSB, 1994a). Second Chance was a Milwaukee district project that followed up on non-completers in an effort to identify barriers to retention and reentry. One result of this study was that the college now offers more convenient scheduling options for students to promote attendance. Additional efforts to ascertain enrollment, participation, retention and completion of disadvantaged students is needed to understand program and service needs and barriers system wide.

Limited English Proficient

The WTCSB uses the following definition to identify individuals with limited English proficiency in the postsecondary vocational education system:

> *Limited English Proficiency* (when applied to individuals) means individuals who were not born in the United States or whose native language is a language other than English, individuals who come from environments where a language other than English is dominant, and individuals who are American Indian and Alaskan Native students and who come from environments where a language other than English has a significant impact on their level of English proficiency; and, by reason thereof, have sufficient difficulty speaking, reading, writing, or understanding the English language to deny them the opportunity to learn successfully in classrooms where the language of instruction is English (WBVTAE, 1993c).

In 1992-93, support services funded under the Perkins legislation served 1,631 LEP students. These services included counseling (personal and career planning, assessment and referral) and tutoring. LEP students work with counselors to develop individual instructional plans. At some technical colleges, an LEP specialist serves as an advisor and advocate for the LEP student, and assists with job development and placement if needed (WTCSB, 1994a). Additional information on programs and services available for LEP students was unavailable at the time of the report.

Single Parents, Displaced Homemakers, and Single Pregnant Women

In the *1992-93 Annual Performance Report*, the WTCSB reported a total of 1,367 single parents, displaced homemakers and single pregnant women were served through Carl Perkins-funded activities in technical colleges in the 1992-93 program year (WTCSB, 1994a). Preparatory services and high-wage career outreach are the focus of the Statewide Model Program for single parents, displaced homemakers and single pregnant women. The funds were directed to serve this group by emphasizing adequate preparation for students to succeed in a chosen career, and by helping them explore careers and choose a family sustaining occupation. Single parents, displaced homemakers, and single pregnant women are recruited, referred to and provided financial assistance for the exploration of career options -- with emphasis on higher wage occupations -- available to them through the technical colleges. Programs coordinate with local JOBS, JTPA, and Perkins' Vocational Act funded teen single parent programs, specifically.

Participants in the 72 hour career planning and assessment course are eligible for referral to basic skills programs or other preparatory services for vocational-technical training with financial assistance for tuition, fees, supplies, books, materials, and dependent care and transportation assistance as well as to receive on-going case management services. Assistance is based on individual need and local resources. Supplemental services such as child care and transportation are often financed or provided jointly through JOBS and JTPA. The program coordinates with a 36 hour Success Skills Course designed for individuals needing further skill development to ensure success in their chosen program of study. After a semester of preparatory work the student is expected to enroll in a vocational-technical program the following semester. Some of the 16 programs operating across Wisconsin feature career planning for specific population groups such as Hispanic, Hmong, Native American, and African American women (WTCSB, 1994a). These Perkins grant-funded activities produced the following outcomes in 1993:

Continued in Program	35%
Enrolled in Occupational Program/Course	16%
Enrolled in Remedial Service/Course	14%
Obtained a GED, HSED, or High School Diploma	13%
Completed an Occupational Program/Courses	8%

The reported percentages reflect some duplication as an individual may have more than one outcome. Also note that outcomes for these activities are based on the intended purpose of the activities -- to provide career planning and training which allow an individual to enter and succeed in a high wage vocational training program.

In April 1994, the American Association for Women in Community Colleges recognized the 72 hour Life Options Class for single parents and displaced homemakers at Waukesha Technical College as a model program. This successful program impacts many women including women from the Hispanic community, through an extensive community network and financial resources donated for scholarship and programming activities. Another program, offered at Moraine Park Technical College, combines monies from Title IIC and state funding for displaced homemakers to provide comprehensive services for a variety of women. This program has been very successful and the program has received increased funding to serve additional women. This program was also chosen by the National Center for Research in Vocational Education in 1993 as one of four programs nationwide that provide exemplary services to special populations.

In 1992-93, the state-funded Displaced Homemaker Program served an additional 2,259 students with awards from state General Purpose Revenue and a federal block grant from the Department of Health and Social Services. Of those served in the program, 98% were women, 15% were minorities, 18% were persons with disabilities, and 89% were economically disadvantaged. Fifty-four percent of the participants had a high school diploma or GED, 21% had less than a high school education, and 25% had more than a high acyl education (Johnson, 1994). The Displaced Homemaker Program offered the following array of services:

- Coordinated services with other funding
- Personal/Group Counseling
- Assessment/Evaluation
- Career Awareness/Exploration
- Financial Assistance
- Job Placement
- Transition Services
- Occupational Training (Johnson, 1994)

Data on program completers indicates that 66% obtained employment, 33% enrolled in occupational degree programs and 25% continued in the program activities (there are duplicated counts for individuals who are enrolled in school and employed) (Johnson, 1994).

Sex Equity

Each technical college district chooses whether or not to apply for a sex equity grant. In FY 93, 7 of the 16 districts were funded for such initiatives. Sex equity activities served 616 individuals through Perkins awards in 1992-93. These programs emphasize career exploration and non-traditional enrollment. Projects concentrate on increasing enrollments of women in fields traditionally dominated by men, such as police science. These projects also target increasing male enrollments in traditionally female occupations such as nursing. Increased enrollments in program areas such as welding, police science and computer assisted design are attributed, in part, to sex equity activities.

The efforts to increase non-traditional participation to at least 25% in program areas that are traditionally either male or female dominated, have met with incremental success. The following programs have increased their non-traditional enrollments by 10% or more in the past five years. (The first three program areas listed have increased male enrollment, the following five programs have increased female enrollment):

- Marketing Communications
- Food and Hospitality Management Tech.
- Food Service Aide
- Emergency Medical Services Specialist
- Drafting-Architectural
- Machine Maintenance
- Building Services
- Drafting-Marine

Six of these eight programs have increased their non-traditional enrollment beyond the targeted 25% minimum level for gender equity enrollment (Johnson, 1993).

Attrition

Postsecondary enrollment patterns are difficult to assess. In part this is due to the wide range of courses, workshops, activities and degree programs students can participate in on either a part-time or full-time basis. Retention (persistence and completion) and attrition rates are even more problematic to assess because students enter and leave, at all levels of the system, quite frequently. For instance, older students are more likely to enroll part-time, and take courses intermittently, due to economic and family considerations. Head count figures for the 450,000 students in Wisconsin's technical college system in 1992-93 support this claim. The figures indicate that only 16,946 are full-time program students, while 58,704 program students are enrolled part-time, and 405,635 students are enrolled in courses rather than or in addition to degree programs (WTCSB, 1994, Client Reporting System).

Identifying attrition can easily become even more problematic for special populations students because they face additional personal and academic barriers that may affect their ability to remain in a program or complete a course. Financial burdens, child care needs, lack of transportation, academic problems, and unidentified accommodation or equipment needs are just a few of the additional burdens special populations students must overcome to remain and succeed in postsecondary courses and programs.

However, tracking attrition, retention, and completion in programs and courses can provide important information about why students leave. Knowledge of leavers and non-completers can provide insight into program and service interventions and strategies which are missing or ineffective. It is important for the technical colleges to know whether the barriers to completion are program and institutional related or personal. This information can then be used to direct future planning of programs and services.

Currently, individual districts track some information on program retention locally. But there is no formal follow-up on course and program "leavers." In an effort to understand the benefits and successes achieved by all students, the WTCSB is working on methods to track course completion within the system. There are no plans, however, to develop procedures at the state level to identify the reasons for program and college attrition due to the difficulties and expense of identifying, contacting and interviewing those who exit the system.

Outcomes – Follow-up, Performance Measures and Standards

Follow-up

The Wisconsin Technical College System Board annually conducts and publishes a Graduate Follow-up report. The report is based on a survey sent to graduates six months after their graduation from a technical college. The 1992-93 survey was sent to 15,835 graduates, and 13,298 responded (an 84% response rate). The report features graduate perceptions and employment information. In 1992-93, 96% of respondents reported being satisfied with the training they received at the technical colleges. Of those responding, 92% were employed, and of those, 80% held jobs related to the training they received. Respondents employed full-time in a job related to their training who reported their salaries earned a monthly median salary of $1,473 (median means that one-half of those reporting earned more that $1,473 and one-half earned less). The reported salaries ranged from a low of $216 per month to a high of $4,822.

Although the report identifies follow-up information for individual instructional divisions and program areas, it does not provide specific information on special populations graduates. This unfortunately means that while we know the graduation rates of these students, there is little information on their transition into the worlds of work and independent living. For students with special needs, longitudinal information regarding employment and independence can provide valuable feedback regarding program and service impact.

Performance Measures and Standards

Annually, the WTCSB reports pertinent outcome data for all sixteen technical college districts on the performance measures and standards for all Perkins funded activities. In the *1992-93 Annual Performance Report*, the WTCSB reported on the districts' performance standard compliance as follows:

> Measure 1 (Program graduates): All sixteen districts exceeded the 35% graduation rate. The statewide graduation rate was 45%.
>
> Measure 2 (Job Placement): All sixteen districts exceeded the 75% job placement standard. A statewide total of 91% (of those available for employment) were employed.
>
> Measure 3 (Remedial Basic Skills): The data for this measure was unavailable at the time of this report.
>
> Measure 4 (Project Employment Outcomes): This measure was discontinued, as most Perkins funds were targeted at services designed to retain and mainstream students rather than prepare them for immediate employment.
>
> Measure 5 (Grant Activity-Training Outcomes): 13 of the 16 districts exceeded the 40% standard. Statewide, 62% of clients served under Perkins funded projects had positive training outcomes (WTCSB, 1994a, p. 3).

The information is Table 11 is taken from the WTCSB's federal performance report and pertains only to individuals who were served in Perkins-funded activities. When the WTCSB calculates the performance levels for the individual districts, all special populations students are included (with the exception of the Training Outcomes which is specific to the Perkins projects). As a result, the overall percentages for special populations' graduation and placement rates in relation to the standards may vary from those shown here.

Table 11 indicates the percentages of special populations students who graduated, were employed or had training outcomes from participating in Perkins funded projects. Results from the performance measures and standards must be interpreted with an eye toward the limited information they impart. The graduation rates reported in the performance measures and standards include graduates of full-time, one-year and two-year vocational training and occupational associate degree programs. Job placement rates are determined by the percentage of special populations who reported being employed after graduation. Special populations training outcomes of the Perkins-funded projects are measured by participation in vocational-technical programs or further development activities. The percentages shown here represent an average of rates reported from all sixteen technical college districts. Not all districts met or exceeded the standards for project participants; indeed, some districts have been identified as needing to address special populations participation as a result of failing to meet the standards.

Table 11

WTCSB Perkins II Performance Measures and Standards
Special Populations Outcomes

Performance Measure and Standard	Disabled	Academ. Dis-advantaged	Econom. Dis-advantaged	LEP	Sex Bias	Male	Female
Graduation Rate 1991-92 (Standard = 35%)	35%	31%	39%	34%	24%	41%	47%
Job Placement Rate 1991-92 (Standard = 75%)	77%	88%	88%	85%	0%	90%	92%
Training Outcomes 1992-93 (Standard = 40%)	65%	54%	64%	47%	86%	57%	65%

(Source: WBVTAE, 1993. *Table D: Perkins II Performance Measures and Standards.*)

The standard graduation rate of 35% was nearly met or exceeded by all special populations groups served in Perkins-funded activities except the LEP and sex bias program participants. The graduation rate of the state as a whole was 45%, but in every case special populations groups graduated at a much lower rate. The job placement rate standard was exceeded by every special populations group, although the state average rate of 91% placement is on average 8% higher than the placement rate of special populations individuals. Training outcomes exceeded the standard rate of 40% in all cases. The WTCSB noted that the high incidence of meeting this standard may indicate that the standard is set too low, and may need to be revised. Further information on training outcomes in projects funded with Perkins funds is provided in the table below.

Table 12 below provides information on training outcomes for Perkins funded projects. Recall that Perkins projects tend to prioritize "up-front" services which enhance access for special populations students; therefore, enrollment is considered to be an outcome of these services. Services assisted over 22,000 students in enrolling in occupational programs or courses in 1992-93. Enrollment in non-traditional programs and remedial programs was accomplished for another 8,000 students. Training outcomes for Perkins projects also show that over 14,000 special population students completed these courses and programs. Enrollment outcomes appear to be more substantial than completion outcomes for this performance measure. This may be due to the emphasis placed on prioritizing support services and counseling which assist special population students entry into postsecondary education. The relatively low completion rates for Perkins projects is not explained in the performance report.

Table 12

Training Outcomes for Perkins Funded Projects
1992-93

OUTCOME	COUNT*
Enrolled Occupational Program/Course	22,610
Enrolled Non-Traditional Program/Course	968
Enrolled Remedial Program/Course	7,146
Completed Occupational Program/Course	7,358
Completed Non-traditional Program/Course	390
Completed Remedial Program/Course	6,320
Obtained High School Diploma or Equivalency	1,618
Other	1,532
Total all Training Outcomes	69,618
Total all Clients	42,059

* Duplicated Count

(Source: WBVTAE, 1994. *1992-93 Annual Performance Report for the Carl D. Perkins Vocational and Applied Technology Act of 1990.*)

Summary

The WTCSB recognizes improved access and success of special populations as a primary intent of the Perkins legislation. To this end, the WTCSB targets funding of plans and projects that prioritize improvement of support services to special populations. The delivery of these services begins with counseling and guidance services, including assessment, information, referral and career counseling aimed at facilitating enrollment and placement of special populations. Supplemental services, remedial education, staff development and curriculum improvements help special populations students to participate and succeed in postsecondary programming. Coordination between local providers and funding sources rounds out the array of services targeted to serve special populations students. In the 1994-95 guidelines, districts are required to list the unmet needs by special population category and provide an internally generated prioritization of services to address those needs.

A variety of funding sources are used to provide services and accommodations for special populations, including monies obtained through state GPR and DVR revenues, and federal legislation such as the IDEA, JTPA, ADA, AEA and Perkins Acts. In 1992, federal Perkins funds provided only 2.5% of the expected $410 million in operational costs for Wisconsin's postsecondary vocational education system (WBVTAE, 1991d. *Vocational and Applied Technology Education Act Guidelines 1991-92*).

Access to quality vocational programs at the postsecondary level is watched by the WTCSB monitoring and evaluation practices. The WTCSB monitors over 1,000 approved programs for general operational factors such as enrollment and placement on an annual basis. Selected programs are reviewed on a five-year rotating basis, in which WTCSB staff provide recommendations for program improvement in eight areas (including equity and access), offer technical assistance and help develop action plans. In compliance with Perkins regulations, WTCSB reviewed Perkins funded projects with an emphasis on monitoring delivery of services and assessing special population access. On-site visits of 11 of the 16 technical college districts will be complete by the end of 1994, with the remaining 5 districts to be monitored in 1995.

The WTCSB relies on the Client Reporting System data to provide information on enrollment, student characteristics, and completion. The data from this system is also used to develop the performance measures and standards required under the Perkins Act. Three of the five performance measures used by the WTCSB provide specific information on special populations. In 1991-92, graduation rates of 35% (the standard set by the WTCSB) were accomplished for all special populations groups except the LEP and sex bias program participants. The job placement rate standard was exceeded by every special populations group, although the state average rate of 91% placement is on average 8% higher than the placement rate of special populations individuals. Training outcomes exceeded the 40% standard set by the WTCSB in all cases, but enrollment outcomes appeared more substantial than completion outcomes for this performance measure. An annual Graduate Student Follow-up Survey reports on student post-graduation employment and placement outcomes. The report does not provide information on special populations student post-graduate perceptions, employment or independent living status.

Special populations students are enrolled in all occupational areas offered in the technical college system. The Business, Health and Technical program areas have the highest concentrations of special populations students. A large number of Academically and Economically Disadvantaged students are participating in Adult Basic Education (ABE) programs and courses. Staff at the WTCSB report that there are an increasing number of students coming to the technical colleges in need of remedial and basic skills education. This has placed an increased demand on the courses and programs designed to assist students with gaining the credentials necessary to enter degree programs.

The WTC Districts provided services to over 42,000 special populations individuals through Perkins funding in FY 93. Counseling services are prioritized by the WTCSB for Perkins activities, and they are targeted to serve special populations students first. These services assist students in identifying any particular academic or service needs they require to successfully complete their program at the technical college. These services are essentially "front end" services which help students to enroll in programs and services to meet their needs. Assessment of students in the technical colleges is generally done prior to entry. ASSET tests are most frequently used by the districts, supplemented by informal assessment conducted by counselors using information from high schools, portfolios and interviews with parents and students. The WTCSB will be requiring all technical colleges to detail comprehensive assessment provisions as part of the RFP process in the future. These descriptions should include processes for testing and identifying special populations students' interests, abilities, and special needs.

The WTCSB works with a number of outside agencies to provide a breadth of services to special populations students; these services are designed to facilitate entry, participation, transition and job placement. High Schools, Private Industry Councils, DVR and community social service agencies provide a service provision and funding network to serve these students. Transition services appear to be most comprehensive for students with disabilities. Disadvantaged and LEP students do not appear to receive similar benefits to students with disabilities. These groups lack a cohesive support network at the postsecondary level. Special populations students receive referrals and information but may lack the direction they need to work their way through the labyrinth of outreach and academic services and providers. More needs to be done to provide these students with adequate transition planning and assistance.

Currently, it is not known how many special population students are participating in new and emerging vocational education initiatives. There is no definitive data on special populations enrollment and participation in Tech Prep. There is also little evidence of direct transition or delayed entry information regarding special populations students' entry patterns into postsecondary colleges.

PROFILES OF WISCONSIN VOCATIONAL EDUCATION PROGRAMMING

The final two sections feature a qualitative, in-depth review of vocational education programming for special populations at the local level. These case studies of secondary and postsecondary programs and services are not intended to represent Wisconsin's vocational education delivery system as a whole, nor are they to be considered as the only "best practice" models within the state. Rather, this information is intended to provide local program level insights, lessons and recommendations for change useful to schools across Wisconsin.

Parker High School and Blackhawk Technical College, both located in Janesville, Wisconsin, are the sites profiled in this section. Criteria for site selection was based, in part, on evidence of a full range of quality vocational education programs and activities serving special populations. In determining access for special populations to **quality** vocational education programs and services, potential quality components of vocational education for special populations were obtained through a review of recent studies in the field. These studies included research which identifies effective quality vocational education components for special needs students (Phelps & Wermuth, 1992), a report on designing performance measures for Perkins funded programs (Hoachlander, 1990), and evaluation reports by the National Assessment of Vocational Education (NAVE) that focus on access issues for special populations in Perkins-funded programs. The criteria for site selection gathered from these reports included five areas: Vocational education courses, support services, guidance and counseling, administrative support and school to work transition. Another consideration used for site selection was that the secondary and postsecondary institutions be located within the same district so that transition and articulation practices could be reviewed. Final site selections were made on nominations from selected educators in the field of vocational education for special populations individuals, and staff at the Wisconsin Department of Public Instruction and Wisconsin Technical College System Board, and the Wisconsin Council on Vocational Education.

Information was obtained through a series of focus groups, on-site interviews and data collection activities. School personnel (teachers, counselors, coordinators and administrators) completed program and student data surveys and participated in a semi-structured interview format focus group session. Vocational education students, including special needs students, were interviewed individually. The focus group and interview questions were designed to assess each group's perceptions of the school's or college's vocational education programs and services for special populations.

The profiles describe recruitment, enrollment and placement of special populations in vocational education programs and services. They also include a review of transitional linkages between secondary and postsecondary vocational education programs and services for special populations youth. School-based information and student-based information on special populations' access to quality programs and services was collected and analyzed. The profiles relate successful practices, services and programs as well as any potential improvements or needs that school staff identified. Taken together, this information provides lessons and recommendations for change which may be useful to schools across Wisconsin.

HIGH SCHOOL PROFILE: PARKER HIGH SCHOOL

School Characteristics and Demographics

Parker High School is one of two high schools in the Janesville School district, located in a small urban community of 51,000 in southern Wisconsin. Parker High School serves roughly 1,500 students in grades nine through twelve. In September, 1993, Parker's reported enrollment totaled 1,464 students, of which half were male and half female. The report listed 179 (or 12% of the student population) as students with the following disabilities:

49	Cognitively Disabled
38	Emotionally Disabled
92	Learning Disabled

Less than 18% of the students enrolled at Parker High School were identified as Black, American Indian, Asian or Hispanic. School-wide, 137 (or 10% of the student population) were reported to be economically disadvantaged. No figure for school-wide at-risk or academically disadvantaged population was available. It is estimated that special populations students comprise approximately 36% of the total student body at Parker High School. Administrators expect next year's enrollment to climb to 1,600, with EEN (Exceptional Educational Needs -- students with disabilities) enrollment rising to 14% of the student population, and at-risk students comprising 20% of the freshman class.

In FY 1993 (1992-1993 school year), Parker High School reported the following vocational education enrollment characteristics to DPI:

Table 13
Parker High School Vocational Education Enrollment by Student Characteristics

Student Characteristic	Individuals with Disabilities	LEP	Disadvantaged	All Other Students	Total
Vocational Education Enrollment	53	1	182	436	672
Consumer and Homemaking Education Enrollment	16	0	26	54	96
Total	69	1	208	490	768

(Source: Wisconsin DPI, 1993, VEERS data.)

The total vocational education enrollment includes students who enroll in at least one course that is part of a vocational program area. Consumer and Homemaking Education enrollment includes participation in such courses as family studies, consumer economics and homemaking education. Of the 768 participating students at Parker High school, 36% are special populations students, which is the same percentage as their incidence in the general school population. These figures are similar to the DPI statewide estimates, which report that 34% of the general student body statewide are members of special populations groups, and 36% of students participating in vocational education are members of special populations groups (Wisconsin DPI, 1994b, p. 90).

Programs and Services

Parker High School staff supports full integration and access to all classes for all students. School administrators and staff agree that progress in mainstreaming all students with special needs is a strong point of Parker's educational delivery system. To make inclusion possible for the full range of students, a combination of curriculum modification, alternative programming, remedial instruction, parent involvement, and support services are employed to assist students. Staff development activities, dialog time (planning time for regular and special education teachers to jointly develop curriculum, accommodations and classroom strategies), and team teaching are other approaches used by instructional staff to better serve a diverse student population.

Mainstreaming of special populations students in vocational education occurs in four distinct ways at Parker. Students participate in:

1. Vocational education classes without support.

2. Instructionally supported classes (either team taught, supported by an integration specialist or a combination of both).

3. EEN self-contained classes (e.g., Tech Ed Exploration, an EEN class taught by EEN staff in concert with Tech Ed. teachers).

Vocational education opportunities for special population students at Parker High School consist of a wide range of options:

- Vocational/occupational courses
- Work Experience
- Co-op
- DECA (Distributive Education Clubs of America)
- HERO (Home Economics Related Occupations)
- JTPA summer programs
- SNAP (Special Needs Articulation Program with Blackhawk Technical College)
- Career Centers (Library resources, media and computer software for developmental guidance and career exploration activities)
- Tech Prep integrated and applied curriculum
- Community Based Instruction

Special populations students participate in work-based learning programs such as: EEN Work Experience, JTPA Work Experience, HERO Co-op, DECA, Tech Ed Co-op, and the JTPA summer program. Access to these work-based learning options is limited for many special populations students, because these options are generally available only to students who have completed a sequence of vocational courses. Exceptions for special populations students are sometimes made with the help of motivated instructors and through the IEP process.

The side bar lists alternative programs available to meet the non-traditional learning needs of special populations students. Many of these programs are specifically designed to assist students in remaining in school and earning academic credits. While some of these programs have a special populations emphasis, not all programs link special populations students to vocational instruction.

Alternative Programs for Special Populations Students

- SAPAR (School-Age Parent At-Risk)
- SWS (School-Within-A-School)
- Al-Pro (ED students)
- On-Site Suspension
- EEN Program
- LEP Program
- Summer School
- JTPA Summer Program

(Source: *Children At-Risk Programming: The Umbrella of Preventative Programming and Supportive Services*, School District of Janesville)

SAPAR (School-Age Parents At-Risk) -- In this program, pregnant teens and teen parents are encouraged to stay in school and earn credits toward graduation. The classes focus on health, social issues, parenting, English, consumer education and physical education, but students may take regular high school classes as well. There is little vocational content offered in this program.

SWS (School-Within-A-School) -- This is an alternative program for at-risk students who are unable to learn in traditional classroom settings. The program operates as a small learning community in which students concentrate on improving academic competencies, self-image and behavior, and achieving vocational success. This program used to have a strong vocational component at Parker, including work experience and career counseling, but no longer emphasizes formal vocational linkages. The district is working on a process to provide more formal work experience, mentoring and vocational options for students in this program.

Al-Pro -- This program serves emotionally disturbed youth and focuses on reducing delinquency and helping students develop appropriate behavior to better their success in pursuing educational and vocational goals. At Parker, the ED resource room is a self-contained classroom where ED students get additional help in school from special education instructors and integration specialists. This program has strong ties with the regular vocational classroom in which students are frequently mainstreamed. The program also offers students work experience, employability skills and job portfolio development opportunities.

EEN Program -- Parker High School has a strong special needs program that features inclusion of special needs students in regular and vocational education classrooms. With over 180 special needs students, the high school employs a special education coordinator, 15 teachers and 15 aides (integration specialists). In the 1994-95 school year, Parker High School will offer 25 EEN or DVI sections of vocational education instruction, and 19 hours of instructional support for team teaching in vocational education.

LEP Program -- English as a Second Language (ESL) courses and study skills are provided to students with limited english proficiency. In FY 94, Parker High School only had 10 students enrolled in these courses. This is considered a "stand alone" program, with no direct ties to vocational education. Students have access to all vocational classes and are mainstreamed regularly. JTPA summer programs for LEP students offer basic skills training to obtain employment and introduce students to work culture.

Summer Programs for at-risk students are funded through the Job Training Partnership Act, and are offered in cooperation with the CESA, Blackhawk Technical College, Janesville high schools, the Private Industry Council, business and industry. Pre-employment training focuses on basic job skills and remedial education; ACT (Attainment through Computer Technology) provides basic keyboarding and computer literacy training; and Job Exploration/Placement provides 9-11 grade students with job preparation and job placement opportunities.

Tech Prep -- Parker High School's Tech Prep initiative features a school-wide emphasis on integrating academic and vocational curriculum. Special populations are "not targeted" for Tech Prep, but they are also "not excluded," as Tech Prep is "designed for all students," say administrators. The Carl Perkins Local Plan for 1994-96 includes a goal to "continue to improve services to special student populations (EEN and At-Risk) through assessment, occupational preparation, and transition between vocational education options within the 6-12 experience and with respect to post-secondary transition." The local plan also directs the Tech Prep special populations subcommittee to modify and adapt curriculum specific to the needs of students (School District of Janesville, 1994).

SNAP, or the Special Needs Articulation Project, is sponsored by the CESA and allows special needs and at-risk youth the opportunity to attend classes at Blackhawk Technical College in the second semester of their senior year. Participants in this program gain exposure to the educational and career options available to them at the postsecondary level by participating in mini courses and job shadowing experiences in Auto Body, Welding, Information Processing, and Pre-Vocational Nursing. The program also stresses developing self-advocacy and determination skills. This articulation project is designed to enhance the transition of special populations students to further education and career options. Currently, 30 students from the county are participating, of whom 6 are special needs students from Parker High School.

Support Services

Services that assist special populations students in succeeding in the vocational education classroom and transition at Parker include:

- Vocational assessment
- Modified grading (Level 1, 2, and 3 competencies)
- Individual Education Plans (IEP) for all students with disabilities
- Scheduling assistance
- PASS (At-risk resource room)
- Diploma Endorsement (Certifies students' employability skills)
- Transition counseling for School-Age Parent students

Parker High School provides a wide range of support services, adaptive equipment and assistive technology and curriculum modification options for special needs students. For example, the special needs classroom has several computers with extensive modifications and software options for student use; Braille writers are available; and texts on tape are used extensively. Within the classroom, book-work and tests are modified to meet individual student learning abilities and needs; students with disabilities learn in small group sessions with regular students who help with tutoring; and students can receive additional help in study halls. Physical access is provided through ramps, alternative-style computer tables, exit and entry doors in the building and accessible bathrooms. Mobility assistance within the school is provided by peers and integration specialists. Transportation to and from school is discussed at M-team conferences for students with physical, cognitive or social/behavioral disabilities. If a transportation need is identified, it is met through a private carrier company. SAPAR students are not currently provided child care assistance, but a day care is planned for the next school year.

A variety of counseling professionals provide services and activities for special population students to assist them in succeeding in school:

- School Psychologist
- School Counselors
- Developmental Disabilities Counseling
- Group Sessions
- Educational Service Center Staff
- Medical Assistance
- Parent with Parent Program
- Public Health Department
- Division of Vocational Rehabilitation
- School Social Worker
- Private Providers

A career development center in the school library features WCIS Career Visions software, publications and videos for career exploration and awareness activities.

Staff

Parker High School has 13 vocational education teachers who instruct at least 1-3 vocational education courses each and assist students who are members of special populations. There is a total of 18 teachers involved in vocational education projects or activities. The high school has four guidance counselors and two support staff to assist students. The school employs 15 special education teachers, one speech and language specialist, one physical therapist, one occupational therapist, a CPTA and a COTA. In addition, the school provides 15 Integration Specialists (aides) to assist special needs, teen parent and at-risk students.

Team teaching, staff development, the implementation of Designated Vocational Instruction (DVI), strong advocacy of special needs staff and committed leadership from the school principal have collectively served to improve special populations access and chances for success in vocational education programming at Parker. In a focus group session, special education teachers, vocational education teachers, and counselors agreed that there have been significant changes in attitude, among staff in regular and vocational education, toward including and working with special needs students in their classroom.

In the mid-1980s, Parker's special education teachers received training from DPI in the DVI approach to integrate vocational education for special needs students. This set the stage for increasing access and mainstreaming of special needs students in the vocational education classroom. Team teaching is an approach that brings EEN and regular or vocational teachers together to plan, modify curriculum, provide accommodations and materials and finally teach a combined EEN and regular student class. Staff at Parker say that together, the DVI approach and the implementation of team teaching has increased vocational instructors' awareness of curriculum modifications, accommodations and materials that allow special needs students to benefit from vocational instruction. Parker has also implemented "dialog time" -- paid staff release time for EEN and regular education instructors to discuss curriculum, team teaching approaches and accommodation needs of students. As a result, vocational teacher acceptance of special needs students has increased, and there is less tendency toward stereotypes, labels, and stigmas typically associated with special need and at-risk students.

Staff and administrators both agree that while these strategies work well at Parker, there is room for improvement. Despite the advances made in recent years, staff note that coordinated team teaching still needs refinement, and that mainstreaming is not always successful. There is still some reluctance on the part of some vocational educators to fully integrate special needs students in all aspects of vocational instruction. Many claim that there are not enough hours devoted to team teaching, nor enough integration specialists to provide the assistance they need to meet the students' individual needs. There is still the sense that special needs students need special educators or integration aides in the classroom in order to succeed.

Staff development and inservice training in the 1993-94 school year has included transition in-services and workshops, Tech Prep planning, implementation and curriculum development and summer internships for teachers. This summer, over 40 teachers will participate in internships at local businesses and industries. The internships are designed to expose teachers to a variety of jobs and skills. Participating teachers are expected to gain a better understanding of employer needs, career opportunities and related skills required for successful transition into jobs. The teachers will use this information to develop applied academics and integrated curriculum.

Financial Support and Program Administration

The School District of Janesville received $70,000 in formula allocation funds for Title II, Part C for the 1993-94 school year. This money is shared in the Janesville by Parker and Craig High Schools. In FY 94, these funds were applied to staff and program development for Tech Prep and School-to-Work restructuring in grades 9-12. For grades 6-12, monies were directed toward career planning. Perkins Funds are used for WCIS career guidance center and opportunities for K-12 staff to participate in business/industry internships designed to expose academic and vocational instructors to skills used in the workplace.

Special Populations

Individuals with Disabilities

Students with disabilities at Parker High School benefit from an exceptionally strong special needs program. Staffed with over 15 special educators and integration specialists, the staff at Parker are strong advocates for full inclusion of special needs students in the regular classroom. The staff relates that Parker High School's service to special needs students has progressed over the years, as attitudes and cooperation between special, regular and vocational educators has improved. Support from school administration has also provided the autonomy that allows the program to be flexible and adaptable. Positive attitudes, strong leadership, support and flexibility have provided an atmosphere that enhances special needs students' access to vocational programs and services.

Transition services have been provided to Parker High School's EEN students since 1987, before the IDEA legislation mandated them for secondary school students with disabilities. In cooperation with UW-Whitewater, Janesville developed a coordinated, community-based approach to provide transition services to EEN students. The goal of the transition model is to prepare students with disabilities for work and independent/supportive living after they leave high school. Career and vocational development, vocational exploration and skill training are emphasized in this transition model. JTPA and Co-op activities provide job shadowing and work experiences for the students. Chestnut house, owned by the School District of Janesville, provides a community-based environment designed to teach special needs students a variety of life and independent living skills.

The district has formed a Transition Core Team consisting of representatives from business and industry, DVR, local PICs, Blackhawk Technical College, social service agencies, school district special educators and the Local Vocational Education Coordinator (LVEC). In the 1993-94 school year, the Transition Core Team promoted student self-determination by training staff to teach students how to advocate for themselves.

The district employs a transition specialist who conducts vocational assessments; organizes parent information workshops; assists with transition from middle to high school; and links students age 16 and over with DVR and other social service agencies and options. The transition specialist also helps students plan their transition from high school by holding informational meetings for parents, students, teachers and community service providers on post graduate work, education and living options for special needs students. The transition specialist conducts individual transition meetings with students and their parents, school personnel and community agency staff to help plan transition to post-secondary education and employment.

Vocational assessment of students in grades 8-12 informs teachers, parents and the student as to the student's abilities, interests and needs in vocational placement planning, career planning and eventual job placement. The results of the assessments are used in the development of individual student's IEP. Information from the assessments also assists teachers in developing appropriate curricula, identifying accommodation needs and programming students in mainstreamed classes.

Economically and Academically Disadvantaged (At-Risk)

The Janesville School District uses its district data base to identify students at risk. Students are identified as "at risk" if they are:

- Drop-outs
- Truant (missed more than 5 school days)
- Parents
- Adjudicated Delinquents
- One or more years behind in credits (grades 9-12)
- One or more years behind in reading and mathematics skills as measured by the CTBS district-wide test (grades K-12)

Parents are notified of the data regarding their child, and a record is kept with the student's file. A Diagnostic/Prescriptive Team [consisting of a school administrator, counselor(s), psychologist, social worker, special education teacher, speech and language clinician and classroom teacher(s)] meets to discuss the student's needs and provide alternatives for student assistance in school. The team discusses collaborative intervention strategies and recommends interventions that begin with the least restrictive options. Intervention strategies may include:

1. Monitoring student behavior
2. Enlisting the support of other staff
3. Designing alternatives
4. Recommending further assessment
5. Recommending outside agency intervention

As an outgrowth of this process, curriculum modifications may be recommended, or a student may be recommended for participation in a number of programs designed to serve the needs of at-risk students. There are few specific programs designed to encourage participation in vocational education that are targeted for at-risk students. Most services directed toward at-risk students are aimed to assist students in remaining in school and at improving academic attainment. For example, PASS is an at-risk resource room where students go for assistance with study skills and tutoring.

Limited English Proficient (LEP)

Currently, nine students (primarily Asian and Hispanic) are participating in the Limited English Proficiency Program at Parker. The goal of services to LEP students at Parker is to provide the students with the skills necessary to enter and succeed in the regular classroom. English-as-a-Second-Language (ESL) courses available at Parker include ESL Study Skills and ESL English. There is no vocational emphasis in the LEP program at Parker; students have access to all programming at the school.

Non-traditional Enrollment

Parker High School has no formal process in place to encourage non-traditional enrollment in vocational education courses. All classes are considered to have "open" enrollment, and opportunities for males and females to enroll in any class are not restricted on the basis of gender. Non-traditional enrollment is left to the postsecondary colleges to pursue.

Outcomes – Attrition, Graduation, and Follow-up

The School District of Janesville reported a 2.7% district drop out rate for the 1992-93 school year. The rate was based on figures obtained from the district's two high schools, which indicated that 78 of the 2,938 high school students enrolled, dropped out in the 1992-93 school year. Follow up on leavers is not routinely documented by the schools or school district, and specific information on special populations student dropouts was not available.

Follow-up information is collected by DPI in the form of Graduate Intentions and vocational education follow-up reports. Parker High school's graduating seniors are included in the graduate intentions data along with Janesville Craig High School. Together, 609 students at the two schools reported graduate intentions in FY 93. Of these students, 58% planned to attend either a two-year vocational technical program or a two-year or longer college or university (this compares to a state average of 71.1% of students intending to attend college, WCES, 1994b). In this report, special populations students are not documented separately. The VEERS data on Parker High School's vocational education completers, was incomplete for FY 93, therefore no conclusions on the number of special populations graduates can be drawn at this time.

In 1993, a follow-up study of Janesville School District EEN graduates was conducted by members of the district's Transition Core Team. The report details information on EEN student graduates' employment, living arrangements, postsecondary training, leisure activities and use of community service providers. Forty-six students were surveyed, with 39 responding. The report listed 24 people as being employed, of whom 9 were employed half-time, and 15 were employed full-time. Nine people were unemployed, one was incarcerated and one was deceased. Only 19% of respondents reported living independently in an apartment, with a friend or in a dorm, on campus. Most respondants (81%) reported living at home. The information on transition services and leisure activities provides additional information on the independent living status of these individuals. This report provides a level of information unattainable from state-level data collection. Information on the type and quality of transition students are achieving is important for understanding the impact of vocational programs and services have on special populations students.

POSTSECONDARY PROFILE: BLACKHAWK TECHNICAL COLLEGE

School Characteristics and Demographics

Blackhawk Technical College (BTC), Central Campus, is located halfway between the cities of Beloit and Janesville. BTC is a two-year public institution which offers approximately 50 associate degree, vocational diploma, and certificate programs in Rock and Green counties. In addition, BTC provides apprenticeship instruction, technical assistance, and customized training programs. Additional centers offering courses and programs also exist to meet the expanding and diverse needs of residents within the community. These centers include: the Aviation Center, the Beloit Center, the Monroe Center, the Janesville Center, and the North Rock County Center. BTC also provides career counseling, financial aid, full and part-time job placement, student activities, and a variety of other services.

In 1992-93 there were 16,500 total student's served at BTC, of whom 2,010 were FTEs. Approximately 70% of those students attended classes at the central campus. Special populations students comprise roughly 62.1% of the 4,192 postsecondary students enrolled in 1992-93 at BTC, with the highest concentration attending at the central campus. The following demographics on special populations students were reported to the WTCSB Client reporting service in 1992-93.

Table 14
Blackhawk Technical College Special Populations Students – 1992-93

Disabled	Academically Disadvantaged	Economically Disadvantaged	Limited English Proficient	Sex Equity Program Participants	TOTAL SERVED
542	2,525	818	26	87	3,998

(Source: Blackhawk Technical College, 1994 *Local Application for Formula Funds*.)

Fiscal Information

Blackhawk Technical College provided the following list of funding sources for vocational education and service to special populations.

Carl Perkins Grant Award:

Title II Part B	
Sex Equity	$ 49,450
Single Parents	$ 63,776
CBO	$ 20,000
Consumer and Homemaking	$ 20,000
Title II Part C, Formula Allocation	$ 608,923
Title III E, Tech Prep	$ 110,110

Other Federal Grant Funds (that target similar groups of special needs students)

Grant Name	Award Amount
Adult Basic Education	$ 426,989
Adult Basic Jail Project	$ 80,295
JTPA 8%	$ 27,500
Parent/Literacy Instruction	$ 25,000
RECAP	$ 252,695

(AODA, Vocational Training, Live Work, U.S. Department of Education)

Other State Funds

Grant Name	Award Amount
GPR-Basic Skills-Project Team	$ 166,294
Adult High School	$ 55,849
Evenstart	$ 72,426
Tech Prep Additional Funds	$ 50,000
Minority Summer Institute	$ 33,033
DVR Interpreter	$ 42,650
DVR Instructional Support	$ 24,500
Displaced Homemaker	$ 42,232

Perkins VEA grants are projected to support 2,526 of the 17,000 students at BTC in 1994-95. The above funding sources are supplemented with local matches: Carl Perkins funds are matched 50% with local funding, and 78% of the Adult Basic Education monies are local. Some of these funds are used to operate the Special Needs Learning Lab, which is equipped with appropriately modified computers and software, assistive technology and materials. Special needs staff are on hand to tutor students and to provide alternative testing options and coordination with classroom instructors.

Financial assistance was received by 1,261 students in 1993-94. Of these, 191 are students with disabilities, 792 received federal Pell grants totaling $1,138,490, and 2 students received BIA grants worth $3,600. The same financial assistance options are available for special needs students as are available for other BTC students:

- Pell Grant
- BIA Grant
- Wisconsin Higher Education Grant
- Student Loans
- Work Study
- Supplementary Education Opportunity Grant (SEOG)

Other sources of financial assistance for special populations students include DVR, JTPA, social services, and Rock County Re-employment. Aid may come in the form of loans, grants, child care assistance, free materials and books, tuition remission or work study options. Several special populations students interviewed at Blackhawk expressed that financial assistance has made it possible for them to consider entering technical college, and then to remain in and complete their programs. Child care assistance and services paid for, and/or provided by DVR ranked high on the list of financial assistance that these students considered most helpful.

Staffing

A variety of staff are employed by BTC to serve the needs of special populations individuals. Seven part-time staff teach specific vocational courses designed for special populations. One lead Special Needs instructor and two part-time instructors teach students with disabilities. Perkins funds pay for three full-time, one half-time and several hourly remedial instructors. There is a full-time special populations counselor, a Special Needs Coordinator, and one full-time aide for students with disabilities. One full-time and one part-time Interpreter is hired to help LEP students. Projects and programs are also conducted for women by the Womenschool Coordinator, Evenstart Coordinator (family literacy & parenting for young, single mothers), the Non-traditional Coordinator, and the Displaced Homemaker Coordinator. Peer tutors conduct tutoring activities according to need.

In addition to program staff designated for postsecondary students, there are a variety of basic skills educational programs on campus and at outreach campuses, including the jail, and at five workplace sites, which serve special populations. Basic Skills services are provided by 35 full- and part-time instructors.

Staff development includes a wide variety of activities, including training in the areas of:

- Career Challenges
- Gender Equity
- Alternative Delivery Systems
- Effective Teaching Strategies
- Sexual Harassment
- Career Decisions
- Adult Literacy
- Reasonable Accommodations
- Transition

Programs and Services

Equitable participation by special populations members is encouraged at Blackhawk Technical College by developing vocational programs and services in consultation with special populations students and parents. A Special Populations Advisory Committee, consisting of students, counselors, special education instructors, and community advocates, provides guidance in planning, developing and evaluating VEA programs. Support Services are evaluated annually and are continually improved to promote student satisfaction. (Blackhawk Technical College, 1994). In 1993-94, the committee provided recommendations to improve services for special populations students, including the need for a program planning guide, purchase of adaptive equipment, and implementation of adequate career counseling (Blackhawk Technical College, 1994).

In addition, the Advisory Committee for Vocational Training to the Handicapped, the Affirmative Action Advisory Committee, Central Campus Advisory Committee, and the Non-traditional Options and Womenschool Project Advisory Committee provide program and service advice and recommendations for students with disabilities, minorities, LEP individuals and women, respectively. All projects are internally monitored for fiscal information, enrollment levels, status of goals and objectives, and review of selected files. As a result, modifications will be recommended and technical assistance provided to ensure program improvements when needed.

For VEA funded programs that failed to meet the Perkins Performance Standards set by WTCSB in subcategories, BTC has taken steps to improve performance levels. A public hearing involving special populations students, parents and community members was convened to review the proposed Local Program Improvement Plan. Objectives and strategies for addressing students with disabilities and sex bias graduation rates, and for improving training outcomes across programs will be in effect in the fall of 1994-95.

Services

BTC offers a number of activities, services, and programs which are designed to provide specific assistance to special populations in earning a vocational diploma or associate degree. Services to special populations students are provided largely through Carl Perkins funding, but are supplemented through local, DVR and secondary school funding sources. The 1994-96 project application for Perkins funds lists the following services and activities that BTC plans to provide to special population students in the upcoming two-year period (many of these services are in place, and the plan indicates continuation of these services):

> *Recruitment and Admissions* activities and services include high school outreach; job shadowing experiences; service fairs; coordination with contracting agencies; identification of special needs individuals prior to enrollment to facilitate individualized counseling and assessment; pre-vocational assessment; academic and occupational assessment; transitional services offered through Womenschool and CO-STEP projects; additional recruitment materials; enrollment in Co-op and apprenticeship programs open to disadvantaged students; review of recruitment materials; and case management.
>
> *Financial Assistance* activities, personnel and services include a Special Populations Coordinator and counselors who provide information to special populations students about financial aid options; a Minority Affairs specialist and special populations counselors who assist students with financial aid application process; mailing of financial aid information to all students; dependent care, transportation and tuition reimbursement provided to Womenschool participants; tuition assistance for single parents, displaced homemakers, and single pregnant women; financial assistance for displaced workers and Individual Referral Classroom Training Project for disadvantaged individuals.

Instructional Support Services and personnel include a Special Needs Instructor and staff to provide tutoring and development of adapted materials and coordination with classroom instructor; remedial and tutorial instruction; review of curriculum for modification purposes; monitoring of student progress; employment development and recruitment; support groups; interpreter services; referral of visual and hearing impaired to HIP/VIP centers; additional adaptive equipment for Special Needs Lab; adult basic skills instruction; Learning Lab, Computer Assisted Learning System (CALS), employment/career counseling and employability skills though the Orientation to Employment Project.

Physical Accessibility is enhanced by a review of accessibility issues and development of five-year plan to bring facilities into compliance.

Transportation services include distribution of information on transportation and specialized transportation for students with disabilities.

Inservice includes training for instructional staff and support staff on issues relating to special populations students.

Follow-up data collection and reports include a follow-up on students with disabilities who leave prior to completing objectives; a survey on special populations students outcomes; an interview and survey of disadvantaged student's outcomes; and a review of Client Reporting information from WTCSB to track services and outcomes achieved by persons with disabilities.

Remedial Instruction includes Adult Basic Skills; brush-up courses; tutoring; individualized remedial instruction for disadvantaged and disabled students; and early identification of academic needs.

Special needs students and other students use the Special Needs Learning Lab, CALS and the regular Learning Lab to obtain extra help, use computers and adaptive equipment. Special needs students and those who need academic assistance are not always identified through the intake process. Teachers often refer a student to the labs when it becomes apparent through the student's class performance that additional help may be required. Students interviewed say they feel comfortable in the labs and that the help they receive there allows them to succeed in their classes.

BTC has a wide range of assistive technology available for student use, including voice synthesizers, enlargers, ergonomic devices, adaptive keyboards, electronic readers, and assistive listening devices. If a student needs additional equipment, it is obtained (if available) through the Technology Loan Center at Northcentral Technical College. Materials are adapted for students on an individualized basis. Examples include taping written materials for visually impaired or learning disabled students, enlarging materials, rewriting or restating classroom materials, etc. Students with disabilities have physical access to all classrooms and other areas in the buildings, automated doors are installed at the main entrances to the building, and any specific accessibility requests are handled on an individual basis.

Examples of in-class services include notetakers, interpreters, readers, tape recorders, one-to-one assistance by an instructor or aide, and alternative testing. In-class service needs are determined on an individual basis and reasonable accommodations are provided. Examples of curriculum modification include extended time, and substitutions of courses. Again, these are determined on a case-by-case basis. Modifications are not provided if they would substantially alter the essential elements of the course or program.

Recruitment activities that provide special populations students information about the technical college programs and services are offered throughout the year. Students Services cooperate with high schools through career days, classroom presentations, and discussions with high school counselors. For example, Learning Center brochures are displayed at the Wisconsin Education Fairs attended by BTC staff. Each year CESA 2, in cooperation with BTC, conducts a provider's fair at BTC. At this workshop, parents, students and K-12 school staff are given information about postsecondary options available in Rock and Green counties for EEN students. Additional visits are made to high schools to meet with interested students, and individual consultations with high school counselors are arranged to accommodate special needs students who want to enroll at BTC.

For students with disabilities, a transition team approach includes students, families, high school staff, DVR, and other agencies working with the student. Services and accommodations are discussed with families and parents during telephone and/or face-to-face conversations about admission and enrollment procedures. A special needs registration is conducted as an accommodation for current and prospective students. Social services and community agencies are included in the transition process when appropriate. DVR is the primary agency with which BTC coordinates for students with disabilities. Other agencies, such as the local PIC, are also involved in the transition process when appropriate. Transition meetings at the high schools are attended by special needs staff from BTC for students with disabilities. A coordinated effort is made by the student and family, the high school, BTC, and community agencies to develop a plan to enable the student to be successful in his/her postsecondary goal.

A Special Populations Coordinator assists BTC staff to develop individual education plans for special populations students in order to determine needs and identify support services; reviews project proposals and programs plans to ensure special population access and services; and supervises special populations counselors. Counselors conduct assessment and referral for all students; health cards and enrollment forms provide students the opportunity to self-identify accommodation and academic needs. Those students are then referred to the Special Populations Coordinator and counselors to receive specific information on services and programs designed to meet these needs. The college employs a Special Needs Instructor to assist students with transition services, supplementary services and special courses. Printed materials, workshops, individual consultations and bulletin boards are used to provide information on an on-going basis to special populations students.

ASSET testing is given to all students at entry. Prior to entry, students are sent a letter notifying them that special accommodations can be made if requested in advance. Special accommodations include extended time, tests on tape, and scribes. This information is shared with the Special Populations Instructor who determines supplemental service needs in coordination with program counselors. Special registrations are held to facilitate proper class placement. The Interest Inventory used is based on Holland's Theory and the results are reviewed with the student by a counselor.

Counseling services or activities designed to serve special needs students include:

- Communication with district High School Counselors regarding special needs students.
- Special Needs Registration.
- Pre-enrollment counseling for special needs students.
- Monitoring of student academic progress and pro-active intervention to remediate issues interfering with student success.

The case management system and linkages to families, high schools, DVR, and social services provided by BTC counseling staff include:

- Follow up on special needs student referrals.
- Response to teacher referrals.
- Referral to both internal and external support programs.

Counselors provide input about career development theory and counseling approaches. They keep informed on the latest information on the role of the counselor in the School-to-Work transition initiatives. Counselors identify the needs of students being served, provide information for program planning, and provide information to staff to ensure program support.

Both staff and students interviewed at BTC agreed that there were not enough auxiliary services available for special populations students. In particular, they mentioned the need for increased child care, transportation and low-income housing to reduce the number of absences and dropouts. These students also need access to health care and additional case management services. Currently, staff see themselves providing personal counseling covering AODA, family, pregnancy and other social issues faced by students.

Programs

Blackhawk Technical College offers a wide range of classes, occupational degree programs, certificate programs, and Apprenticeship programs. Of particular interest are the activities and programs specifically designed to meet the needs of special populations students, such as Non-traditional pre-vocational workshops, GED/HSED preparation, and Womenschool.

Nontraditional Options Project offers four hands-on career exploration workshops per year to introduce women to trade and industrial careers. In 1993, 69 women were enrolled in this project. Two pre-tech courses per year offer pre-industrial training for women and serve approximately 20 women per year. Career Challenges Workshops are provided to 25 women per year. These workshops provide team-building, problem-solving, and risk-taking activities for women enrolled in nontraditional programs. Nontraditional Options Workshops provide interest assessment using Career Assessment Inventory, skills assessment using WCIS Skills Cards, and academic assessment using the Test of Adult Basic Education (TABE). These assessments are used to help a participant choose a match to a vocational program, and to determine what remediation might be necessary before entry into that program.

In 1993, the workshops resulted in 35 women enrolling in non-traditional programs at BTC. In general, the workshops have increased enrollment of women in non-traditional programs. The Special Needs and Minority Services projects help coordinate the workshops, and the advisory board includes four local employers; and staff from local high schools, the local PIC, and the JOBS program. The project was profiled by the WTCSB as an exemplary Sex Equity project in the *1992-93 Annual Performance Report*.

GED/HSED preparation, exams and equivalency diplomas are just two of six high school equivalence options available to special populations students at BTC. Other options are: obtaining an External Diploma; earning a local school diploma through independent study at the BTC Learning Lab; completing P.I. 5.07 (high school equivalency based on completion of 24 postsecondary credits), or fulfilling P.I. 5.09 (demonstrated competency in seven academic areas). These options are open to special populations students at all BTC sites, at no cost to the student. Services attached these programs include tutoring, advising and counseling, assessment and career decision instruction.

Womenschool is a program of services for single parents and displaced homemakers, including workshops on career decisionmaking. These workshops explore areas such as non-traditional careers, high wage/high skill job options and self-esteem building. A Job Readiness workshop is available for displaced homemakers, which offers employability and job-seeking skills. Success Skills for Single Parents offers self-esteem, communication, and organizational skill training for single parents, in order to prepare them for a successful transition into vocational training. Single parents and displaced homemakers enrolled in the Womenschool Program are given a battery of assessments including interest (Career Assessment Inventory), ability (Career Planning Program), personality (MBTI), academic (TABE), and other non-standardized measures including computerized WCIS (Wisconsin Career Information System) assessment to aid them in career exploration.

Several of BTC's programs have an externship, practicum, or clinical experience attached to them. On occasion, a "job coach" (provided by DVR) is requested at the site for students with disabilities. Students have also on occasion been offered the opportunity to spend extra time in a practicum setting for independent credit.

Special Populations

Individuals with Disabilities

The number of students with disabilities attending BTC has grown over the last eight years, and the number enrolling is expected to continue growing. In 1993, over 500 special needs students were served through Perkins funded services and projects. It is expected that in the fall of 1994, over 300 individuals will express a handicapping condition to DVR, secondary schools or community agencies in the local area. BTC plans to inform all of these individuals about the services and programs open to them at the technical college.

For many students with disabilities who are planning to enroll at BTC, a transition meeting is held and attended by the student, parents (if appropriate), and high school and/or agency staff. Through a coordinated transition process, an individualized plan is developed for the student to succeed in his/her postsecondary goal. For students who self-identify a disability when they enroll in classes, a meeting is held with the Special Needs staff, the Program Counselor and/or the Program Advisor, and agency staff, if appropriate. Again, an educational plan, including accommodations, is developed for students based on their individualized needs.

The Special Needs Articulation Project is a cooperative program between BTC and CESA 2, funded through the Private Industry Council. Each year, 35-40 high school students from approximately 10 local high schools are provided the opportunity to enroll in vocational classes at BTC. The students attend BTC three afternoons a week, with two afternoons spent in vocational classes and one afternoon in a Careers class. On the other two days of the week, the students are involved in job shadowing at local businesses and industries. The intent of the project is to offer students the opportunity to experience "first hand" what it is like to attend BTC, and to assess their ability to be successful in a particular vocational area. The project provides an excellent means of transitioning students from the secondary schools into BTC.

In addition, students with disabilities are provided a variety of other opportunities to explore programs at BTC, including tours, shadowing classes, high school presentations, and meetings with counselors and program staff.

Students with disabilities are provided a variety of services, including instructional support, tutoring, alternative testing, and other supplementary services through BTC's Special Services Lab. For more detail on services available to special needs students, refer to the *Services* section above.

The number of emotionally disturbed students attending BTC appears to be growing, according to BTC staff. They are concerned because these students frequently need additional attention and there is not currently a process in place, nor the staff available to handle extreme situations that may occur.

Academically and Educationally Disadvantaged

The number of academically and economically disadvantaged students enrolling at BTC has increased by 27% over the last three years. This increase is largely attributable to referrals from the Job Opportunities and Basic Skills (JOBS) reform initiative and an increased local need for skill retraining. The JOBS program, Rock-County Reemployment, Green County JTPA, two local PICs, the Single Parent/Homemaker Project and the Displaced Homemaker project are all referral sources for disadvantaged students. These clients become students at BTC, participating in Adult Basic Education, remedial and occupational degree programs.

Instructional support and tutoring are available to all students who are academically and/or economically disadvantaged through BTC's Learning Center. There is also a variety of audio-visual materials and other study aids available for student use at the center. BTC's Computer Assisted Learning System (CALS) comprises a variety of software, ranging from basic skills education to highly technical materials, which enhance learning in specific subject areas. Instructors provide instructional support and guidance in this process.

Limited English Proficient

The number of LEP individuals attending BTC vacillates greatly from year to year. There are currently no VEA Perkins funded projects specifically for LEP students at BTC. The technical college does offer beginning, intermediate and advanced level ESL courses to help LEP students transfer into regular programs. LEP students also take basic skills and remediation courses when needed. Staff related that, because there are not a large number of LEP students enrolled at BTC, only minimal classes and services are offered. Staff noted that additional time is needed by LEP individuals to successfully complete their programs and that peer mentors or support groups would help to relieve the dependence the students develop on counselors and instructors.

Non-traditional Enrollment and Sex Equity

Sex Equity programs funded through Perkins monies served 87 participants in FY 93. Support services, such as peer tutoring, support groups, financial assistance, and referral services, are offered to 50 women per year enrolled in nontraditional programs. Individual counseling, program support, and referral services are available to all non-traditional students through the Nontraditional Options Project. Child care funds are available for single parents and displaced homemakers who enroll in the 72 hour model career planning program. Child care is also available for pre-vocational brush-up class participants.

Once a year, 40-50 teen single parents are brought to campus to explore nontraditional careers through hands-on activities. High school students take part in shadowing of nontraditional programs. Occasionally, panels of nontraditional students go to high school career fairs to talk about nontraditional careers. Nontraditional presentations are made to high school students in the Special Needs Articulation Project.

Outcomes

Follow-up on program graduates from BTC is done six months after graduation and provides information on job placement, employment status, salaries, and employers of graduates. This data is collected and passed on to the WTCSB as part of the system-wide Graduate Follow-up Report. No specific information on the placement or employment status of special populations graduates is reported. However, in upcoming years BTC plans to have its Special Populations Coordinator collect information on outcomes of persons with disabilities and disadvantaged individuals, from project files and through surveys.

Although information on special populations completers and leavers can be collected, a number of problems exist in collecting this data. BTC has attempted to conduct a number of follow-up studies on leavers from the system. The BTC research staff relate that these studies have been largely unsuccessful (low response rates and little useable information collected) and are costly to conduct. The research staff also noted that an annual graduation rate of 35% for special populations students was unrealistic, because special populations students often attend technical college part-time and take more than three years to complete their programs. Staff also expressed concern that many special populations students do not actually graduate, but leave the system with competencies and skills needed to obtain employment. Currently, no direct follow-up information is collected to ascertain what those skills are, or what kind of employment they lead to for special populations students.

At BTC only 5% of students transition into the technical college directly from high school. The technical college staff is trying to increase this direct transition rate through the active development of Tech Prep articulation and linkages with area high schools. The technical college has provided inservice training for high school instructors on developing applied and integrated curriculum, and has established a number of dual credit and advanced standing agreements. The Tech Prep coordinator for the technical college has expressed the need to more fully include special populations students in Tech Prep, and steps have been taken to represent special populations on the Tech Prep Implementation Team. To date, there has not been much emphasis on special populations in Tech Prep, and the technical college has no data on special populations students enrolled in Tech Prep activities.

APPENDIX A

SEC. 116 STATE ASSESSMENT

(a) IN GENERAL - Each State board receiving assistance under this Act shall conduct an assessment using measurable objective criteria developed by the State board to assess program quality. Such criteria shall be developed in consultation with representatives of the groups described in section 115 (a) and shall use information gathered by the National Occupational Information Coordinating Committee and, if appropriate, other information. Each State board shall widely disseminate such criteria. State boards shall develop such criteria no later than the beginning of the 1991-1992 school year. Such criteria shall include such factors as -

(1) integration of academic and vocational education;

(2) sequential courses of study leading to both academic and occupational competencies;

(3) increased student work skill attainment and job placement;

(4) increased linkages between secondary and postsecondary educational institutions;

(5) instruction and experience, to the extent practicable, in all aspects of the industry the students are preparing to enter;

(6) the ability of eligible recipients to meet the needs of special populations with respect to vocational education;

(7) raising the quality of vocational education programs in schools with high concentrations of poor and low-achieving students;

(8) the relevance of programs to the workplace and to the occupation for which students are to be trained, and the extent to which such programs reflect a realistic assessment of current and future labor market needs, including needs in areas of emerging technologies;

(9) the ability of the vocational curriculum, equipment, and instructional materials to meet the demands of the workforce;

(10) basic and higher order current and future workplace competencies which will reflect the hiring needs of employers; and

(11) other factors considered appropriate by the State board.

APPENDIX B

SEC. 118 CRITERIA FOR SERVICES AND ACTIVITIES FOR INDIVIDUALS WHO ARE MEMBERS OF SPECIAL POPULATIONS

(a) ASSURANCES OF EQUAL ACCESS FOR MEMBERS OF SPECIAl POPULATIONS - The State board, in its State plan, shall provide assurances that-

(1) individuals who are members of special populations will be provided with equal access to recruitment, enrollment, and placement activities;

(2) individuals who are members of special populations will be provided with equal access to the full range of vocational education programs available to individuals who are not members of special populations, including occupationally specific courses of study, cooperative education, apprenticeship programs and, to the extent practicable, comprehensive career guidance and counseling services, and shall not be discriminated against on the basis of their status as member of special populations;

(3)(A) vocational education programs and activities for individuals with handicaps will be provided in the least restrictive environment in accordance with section 612(5)(B) of the Education of the Handicapped Act and will, whenever appropriate, be included as a component of the individualized education program developed under section 614(a)(5) of such Act;

(B) students with handicaps who have individualized education programs developed under section 614(a)(5) of the Education for the Handicapped Act shall, with respect to vocational education programs, be afforded the rights and protections guaranteed such students under sections 612, 614, and 615 of such Act;

(C) students with handicaps who do not have individualized education programs developed under section 614(a)(5) of the Education of the Handicapped Act or who are not eligible to have such program shall, with respect to vocational education programs, be afforded the rights and protections guaranteed such students under section 504 of the Rehabilitation Act of 1973 and, for the purpose of this Act, such rights and protections shall include making vocational education programs readily accessible to eligible individuals with disabilities through the provision of services described in subsection (c)(3);

(D) vocational education planning for individuals with handicaps will be coordinated between appropriate representatives of vocational education, special education, and State vocational rehabilitation agencies; and

(E) the provision of vocational education to each student with handicaps will be monitored to determine if such education is consistent with the individualized education program developed for such students under section 614(a)(5) of the Education of the Handicapped Act, in any case in which such a program exists;

(4) the provision of vocational education will be monitored to ensure that disadvantaged students and students of limited English proficiency have access to such education in the most integrated setting possible; and

(5)(A) the requirements of this Act relating to individuals who are members of special populations -

- (i) will be carried out under the general supervision of individuals in the appropriate State educational agency or State board who are responsible for students who are members of special populations; and
- (ii) will meet education standards of the State educational agency or State board; and

(B) with respect to students with handicaps, the supervision carried out under subparagraph (A) shall be carried out consistent with and in conjunction with supervision by the State educational agency or State board carried out under section 612(6) of the Education of the Handicapped Act.

(b) PROVISION OF INFORMATION -

(1) Each local educational agency shall provide to students who are members of special populations and parents of such students at least 1 year before the students enter or are of an appropriate age for the grade level in which vocational education programs are first generally available in the state, but in no event later than the beginning of the ninth grade, information concerning -

- (A) the opportunities available in vocational education;
- (B) the requirements for eligibility for enrollment in such vocational education programs;
- (C) specific courses that are available;
- (D) special services that are available;
- (E) employment opportunities; and
- (F) placement.

(2) Each eligible institution that receives assistance under title II shall provide the information described in paragraph (1) to each individual who requests information concerning or seeks admission to vocational education programs offered by the institution, and, when appropriate, assist in the preparation of applications relating to such admission.

(3) The information provided under this subsection shall, to the extent practicable, be in a language and form that the parents and students understand.

(c) ASSURANCES - Each eligible recipient that receives assistance under title II shall provide assurances that such eligible recipient shall -

(1) assist students who are members of special populations to enter vocational education programs, and, with respect to students with handicaps, assist in fulfilling the transitional service requirements of section 626 of the Education of the Handicapped Act;

(2) assess the special needs of students participating in programs receiving assistance under title II with respect to their successful completion of the vocational education program in the most integrated setting possible;

(3) provide supplementary services to students who are members of special populations, including, with respect to individuals with handicaps -

- (A) curriculum modification;
- (B) equipment modification;
- (C) classroom modification;
- (D) supportive personnel; and
- (E) instructional aids and devices;

(4) provide guidance, counseling, and career development activities conducted by professionally trained counselors and teachers who are associated with the provisions of such special services; and

(5) provide counseling and instructional services designated to facilitate the transition from school to post-school employment and career opportunities.

(d) PARTICIPATORY PLANNING - The State board shall -

(1) establish effective procedures, including an expedited appeals procedure, by which parents, students, teachers, and area residents concerned will be able to directly participate in State and local decisions that influence the character of programs under this Act affecting their interests; and

(2) provide technical assistance and design such procedures to ensure that such individuals are given access to the information needed to use such procedures.

APPENDIX C

Excerpts from Vocational Education Enrollment Reporting System Field Manual,
WI Department of Public Instruction, 1993

Characteristic - Code only one for each student, if the student could be included in more than one characteristic category, priority should be given in the same order as the characteristic codes below (i.e., Handicapped is the highest priority with Regular being the lowest):

H - Handicapped
L - Limited English Proficient
D - Disadvantaged
R - Regular

The *Handicapped code* (H) includes any of the following conditions: mentally retarded, hard of hearing, deaf, speech/language impaired, visually handicapped, seriously emotionally disturbed, other health impairment, deaf-blind, specific learning disabled, orthopedic impairment, and multihandicapped. For a student to be coded as handicapped, the student must fall under one of mentioned conditions and for which there must be substantive evidence of condition on file at the district.

The Limited English Proficient code (L) is utilized for the student whose native language is other than English and by that reason has sufficient difficulty in speaking, reading or understanding the English language as to be a barrier to the student's success in the instructional setting. Again, there must be substantive evidence of condition on file at the district.

The *Disadvantaged code* (D) includes categories of academic disadvantagement and economic disadvantagement. For a student to be coded as disadvantaged, the student must fall under one of the following categories with substantive evidence of condition on file at the district:

Academic - Student demonstrates a need based on one of the following conditions: 1) Scores at or below the 25th percentile on a standardized achievement or aptitude test, 2) Whose secondary school grades are below 2.0 on a 4.0 scale where A = 4.0, or 3) Fails to maintain minimum academic competencies.

Economic - Student demonstrates a need based on one of the following conditions: 1) Family or student is eligible for AFDC, Food Stamps, to be counted under Chapter 1 of Title 1 of the Elementary & Secondary Education Act, or free or reduced price meals under the National School Lunch program; 2) Determined to be low income according to the latest data from the Dept. of Commerce; or 3) Identified as low income based upon other indices of economic status granted by the Secretary of Education. (Note: Although the Department of Education uses the criterion of free or reduced price meals under the National School Lunch program as an indication of economic disadvantagement, the Department of Agriculture which administers the program has a policy that forbids the identification of students using the program.)

The *Regular code* (R) is to be coded for the student that does not fall under the Handicapped, LEP, or Disadvantaged coding conditions.

CHE code titles correspond to courses of the Home component identified in the 'DPI Guide to Curriculum Planning in Home Economics, (1987).'

All students enrolled in a CHE course or courses for the reporting year at the 11th, 12th and 13th (ungraded) grade levels are to be reported by school within the district irregardless if the district is receiving IIIB funding.

Educational Pathway - Code the student's informed selected educational program based upon the student's future planned postsecondary outcome from the following list:

1. Tech Prep - Linkages Established: Student is enrolled in a coherent sequence of courses that will continue at a postsecondary technical institution. The district has an arrangement that links the student's secondary and post-secondary instruction.

2. Tech Prep - Linkages being Developed: Student is enrolled in a coherent sequence of courses that will continue at a postsecondary technical institution. The district does not yet have an arrangement that links the student's secondary and postsecondary instruction.

3. College Prep - Student is enrolled in a coherent sequence of courses that will result in a baccalaureate degree at the postsecondary level.

4. Work-Oriented Learning: Youth Apprenticeship - Student is enrolled in a State approved youth apprenticeship program.

5. Work-Oriented Learning: Vocational Education - Student is enrolled in a coherent sequence of courses that will result in academic and occupational competencies that will enable the student to enter a career upon graduation from the secondary level.

6. Work-Oriented Learning: Other Than Youth Apprenticeship and Vocational Education i.e. JTPA, SN, etc. - Student is enrolled in a coherent sequence of courses that will result in sufficient work skills to enable the student to function effectively within the world of work.

7. Undeclared - Student is not enrolled in a coherent sequence of courses with a declared occupational and educational goal.

VE Participant - Code **Y** for yes or **N** for no.

Code yes if the student is enrolled in any course for the reporting fiscal year that is a part of a vocational program area related to the preparation of the student for paid or unpaid employment in current or emerging occupations, otherwise code no for the student. The vocational program areas are: Agriculture Education, Business Education, Marketing

Education, Technology Education, Wage Earning Home Economics Education and Health Occupations Education.

Support Services - Determine if the student is or is not receiving support services such as curriculum modification, classroom modification, supportive personnel, instructional aids and devices or mentoring through one or a combination of support programs and code accordingly from the following:

1. None
2. Single Parent (SPAR)
3. Equity (EQ)
4. Special Populations (SP)
5. SPAR and EQ
6. SPAR and SP
7. EQ and SP
8. SPAR and EQ and SP

Completion Status - (To be completed for all students, irregardless of VE Participation status.) Enter one of the following for each student based on the student's status at the end of the reporting year:

C1 Student has completed the student's selected secondary vocational educational program and has graduated.

D1 Student will not have completed the student's selected secondary vocational educational program but has graduated.

D2 Student has dropped out of school during the current reporting year.

D3 Student has died during the current reporting year.

B1 Student transferred to another secondary district during the current reporting year.

A1 Student is continuing secondary studies.

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